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Painting the future

why and how should ANAC become more market oriented?

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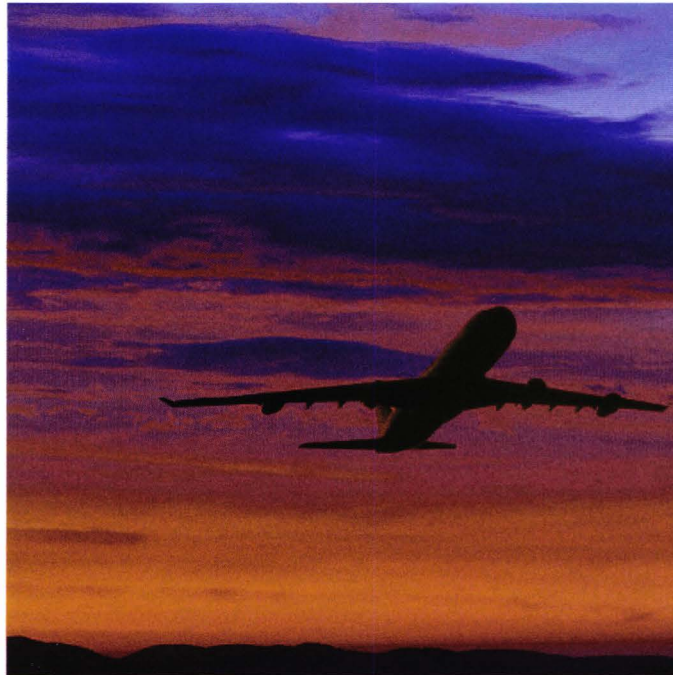
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Painting the Future



Why and How should ANAC become more Market Oriented?

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**niet
uitleenbaar**

Management Summary

This report is the result of my final thesis at the Department of Industrial Engineering and Management Science, Eindhoven University of Technology. The research took place at Akzo Nobel Aerospace Coatings (**ANAC**) in Sassenheim and lasted 10 months in total.

Extensive desk research and interviews formed the basis of this report: in addition to analysis of reports and documents, and literature research on scientific articles and textbooks, data was obtained by interviewing a cross-section of employees at all levels within the organization.

ANAC can be characterized as a highly sales-driven company since its foundation. This culture has taken them to the place where they are now: market leader and highly valued supplier of aerospace coatings with great financial results. However, important changes in the market, and increasingly aggressive competition, force **ANAC** to shift from a sales-driven to a market-driven organization.

A market-oriented organization bases its strategic and marketing decisions on the wants, needs and developments of the market. Accurate, reliable and relevant market information is, therefore, vital.

This research project showed that **ANAC** should improve its culture, structure and processes to be better able to systematically generate, disseminate and use market information in order to make market-based decisions on company strategy and marketing issues.

Clear strategies need to be formulated for **ANAC's** six global focus markets. The complexities of these dynamic and competitive markets make it necessary to continuously scan and analyze the market and its environment for key threats and opportunities. **ANAC** needs a more analytical, reflective and participative approach to decision making, which is based more on thorough analysis and facts than on opinions and gut feeling.

Changing the culture in an organization is the first step towards becoming market oriented: it forms the basis to bring about improvements in the organization structure and information processes. These changes need to be embedded in the new set of shared values, norms and understanding. The implementation of a market-orientation strategy will lead to improved financial and marketing performance.

In brief, this project delivered:

- ✚ **an in-depth description of ANAC's current and desired situation**
- ✚ **a company awareness that ANAC needs to become more market oriented**
- ✚ **a roadmap to create a market-oriented culture**
- ✚ **a concept design for a global ANAC marketing department**
- ✚ **recommendations on how to improve ANAC's information systems and processes**

This report recommended that **ANAC** needs to put, amongst others, the following recommendations into action:

- ✚ **form a Business Improvement team to come up with new market oriented values & norms**
- ✚ **send cross-functional teams into the market more structurally and more frequently**
- ✚ **establish a Global Marketing Department within the organization**
- ✚ **develop a central data warehouse where all market information can be stored and retrieved**
- ✚ **develop the 'Capturing the Market' project**
- ✚ **develop the 'Capturing the Customer's Feedback' Project**

The fact that **ANAC** set up numerous Business Improvement projects such as 'Capture the Market', 'Targeting Market Growth' and 'Capture the Customer's Feedback', as well as having created new functions such as that of product manager color, underlines that **ANAC** is already changing positively.

The limitations of the research were that **ANAC's** management team meetings could not be attended personally and that no research was carried out outside the **ANAC** EMEA headquarters in Sassenheim. Once market-oriented measures are put into action and market information is systematically managed, future research can focus on the question if **ANAC** has the internal capabilities (e.g. R&D, Operations) to actually meet the uncovered market wants and needs.

Preface

This report is the result of my final thesis at the Department of Industrial Engineering and Management Science, Eindhoven University of Technology. The research took place at Akzo Nobel Aerospace Coatings (ANAC) in Sassenheim, The Netherlands.

On March 5th 2007 I started my graduation project at ANAC, which came to an end ten months later. It has been a great experience for me. Not only because of putting into practice the knowledge and skills I have learnt during my studies, but also because of being involved in the business processes of a highly successful and valued multinational company.

From the beginning I felt very welcome within the company; ANAC has an open culture, in which I could move around freely. Doors were always open, and employees were very supportive and enthusiastic to help me during my project. Even people from the highest positions wanted to be addressed with their first name from the start.

I've been told several times by graduated students how writing a thesis goes with ups and downs. I now experienced it myself too. There were times I found it difficult to find inspiration to write or to motivate myself. However, I never gave up, and there was always light at the end of the short tunnel! This light was provided by my university supervisors, my company supervisors, my fellow students, my friends myself, or sometimes simply just by time.

I feel glad to have contributed to shifting ANAC's mindset and creating awareness that ANAC needs to become more market oriented. It was very interesting and pleasing to see how certain people's viewpoints changed over the course of time.

I think the conclusions and recommendations in this thesis provide ANAC with a base that supports its effort in becoming more market oriented. The fact that ANAC set up numerous Business Improvement projects as well as created new functions, underlines that ANAC is already changing positively...

I hereby would like to sincerely thank all ANAC employees and trainees I spoke with, had lunch with and/or had fun with! In particular, my company supervisors Ian, Tsjip, Kees, Robert, Len, and also Robert for showing me a Schiphol maintenance hangar!

Of course, I would also like to thank my university supervisors, dr. Allard Kastelein and prof. dr. Ed Nijssen, for their professional feedback and support. They mostly operated in the background, giving me the room and responsibility to manage my own project, but when serious adjustments were needed, they proved to be very sharp and competent.

Last, but not least, I am very grateful to my parents, who gave me the opportunity to develop myself, both personally as well as educationally, to the person I am now. I learned and still learn a lot from them, and I feel very lucky and blessed for having such caring and supportive parents. I therefore dedicate this thesis to them. 'Paatje en maatje', bedankt dat jullie er altijd voor me zijn!

Dhani Elprana

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List of Abbreviations

ANAC	=	Akzo Nobel Aerospace Coatings
BI	=	Business Improvement
BU	=	Business Unit
sBU	=	Sub Business Unit
EMEA	=	Europe, Middle-East and Africa
EMT	=	EMEA Management Team
GMT	=	Global Management Team
MIPS	=	Market Intelligence & Product Support Group
M&PC	=	Marine & Protective Coatings
MRO	=	Maintenance, Repair & Overhaul
OEM	=	Original Equipment Manufacturers
OWC	=	Operating Working Capital
R&D	=	Research & Development
SEP	=	Social, Emotional, Political
SIPOC	=	Supplier, Inputs, Process, Outputs, Customer
SMEs	=	Small and Medium sized Enterprises
SMT	=	Global Strategic Marketing and Technical Group
TOP	=	Three year Operational Plan
VOC	=	Volatile Organic Compounds

Chapter 1. Introduction

This graduation report consists of seven main chapters, which will now be briefly introduced.

Chapter 2 briefly describes the Akzo Nobel Corporation and its Business Units. Further details will be given on Akzo Nobel Aerospace Coatings (**ANAC**) regarding its organization, markets, products and competitors.

Chapter 3 describes the situation during the orientation phase; reason for the project, the problem definition, project assignment, project conditions and the problem owners provide the framework for the rest of the project.

Chapter 4 describes how the research has been carried out. The research model, research questions, and methods and techniques will be handled.

Chapter 5 covers the concept of Market Orientation drawing on marketing and strategic literature. An answer is given on the following questions: What is market orientation? Why become market oriented? And how to become market oriented?

Chapter 6 covers the results of the research. Once the orientation phase was completed, qualitative explorative research was carried out at **ANAC**. This chapter describes in detail **ANAC's** current and desired situation by making use of the organizational growth model.

Chapter 7 covers the design phase of the project. Through extensive analysis, literature research, and practical knowledge, complementary measures are given that will support **ANAC** in becoming market oriented. Cultural change, an improved organization structure and implementation of information processes are the generated change-initiatives.

Finally, in **Chapter 8** the conclusions of the project are drawn up and recommendations for the future are presented. Next to this the limitations and implications for future research are given. In 'personal reflection' I reflect on my personal experiences during the project as a whole.

Chapter 2. Company Description

In this chapter the company Akzo Nobel, its Business Units (BU) and the relevant sub Business Unit (sBU) will be introduced. Firstly, a brief general description is given of Akzo Nobel, then the Coatings group division and BU Marine & Protective Coatings (M&PC) are described and finally a more detailed description is given of the sBU where the project has taken place: Akzo Nobel Aerospace Coatings (**ANAC**), location Sassenheim, The Netherlands.

2.1 Akzo Nobel



Akzo Nobel is a multinational company based in The Netherlands, which holds leading positions in coatings, chemicals and healthcare¹ products. It employs around 61,880 people and conduct activities in these three segments, with operating subsidiaries in more than 80 countries. Consolidated revenues for 2006 totaled EUR 13.7 billion.

Akzo Nobel is a Global Fortune 500 company and is listed on both the Euronext Amsterdam and NASDAQ stock exchanges. It is also included on the Dow Jones Sustainability Indexes and FTSE4Good Index.

Coatings Group

Akzo Nobel is the biggest coatings company in the world, having developed and supplied innovative coatings products for more than 200 years. The Coatings Group commands leading market positions in almost all its businesses. With operational bases in 60 countries, Akzo Nobel's Coatings businesses employ around 30,000 people. Research and development plays a vital role, underlined by the company's continued success in adding groundbreaking products to its technology-driven portfolio of global brands. Its activities are divided into four Business Units: Decorative Coatings, Industrial Activities, Car Refinishes and Marine & Protective Coatings (see appendix 1 for further details).

Akzo Nobel's Market Intelligence & Product Support Group (MIPS) estimated in 2006 that Akzo Nobel is the market leader on the global coatings market (see appendix 1). Their biggest competitor is PPG, headquartered in Pittsburg, Pennsylvania. PPG has 125 manufacturing facilities and equity affiliates in more than 20 countries around the globe and basically operates in the same coatings markets as Akzo Nobel.¹

Marine & Protective Coatings BU

The Marine & Protective Coatings BU (2006 sales € 1,129m²) is further divided into regions and sub-Business Units; Marine Coatings, Protective Coatings, Yacht Coatings, and Aerospace Coatings (see appendix 2) The graduation project took place within the sBU Aerospace Coatings. This sBU will therefore be described in detail in the next paragraph.

¹ Healthcare: On March 11th 2006 Akzo Nobel announced the sale of Organon BioSciences
² Source: Akzo Nobel Year Report 2006

2.2 Akzo Nobel Aerospace Coatings

Akzo Nobel Aerospace Coatings (**ANAC**) is part of the Business Unit Marine & Protective Coatings (M&PC BU). They offer a wide variety of products ranging from primers and topcoats to specialty coatings to various aircraft and land defense markets. In this paragraph **ANAC's** organization, markets, products and competition will be briefly described.

- **Organization**

ANAC is regionally divided into 3 areas: Europe, Middle East & Africa (EMEA), North & South America and Asia Pacific. **The project took place at ANAC EMEA, location Sassenheim.** The managers of the 3 regions report to the General Manager of **ANAC**. The organization chart of **ANAC** is shown below. The organization structure is handled more extensively in **Chapter 5.2**. In Sassenheim a total of 170 employees work on research & development, operations, product management, sales, logistics, IT, and finance. There are 2 major manufacturing sites, one in Sassenheim and one in Waukegan, USA. They both serve all 3 regions. In order to support its existing sales and distribution operations in Asia Pacific, **ANAC** has recently established some manufacturing in Suzhou, China.

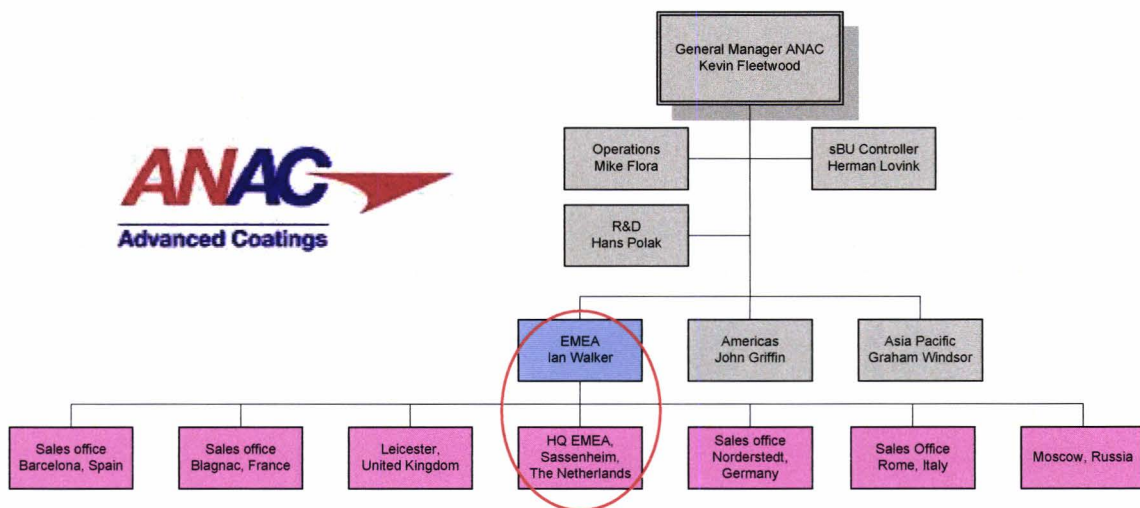


Figure 2.2 Organization Chart ANAC

▪ **Markets**

ANAC currently operates within the following focus markets (see also appendix 4).

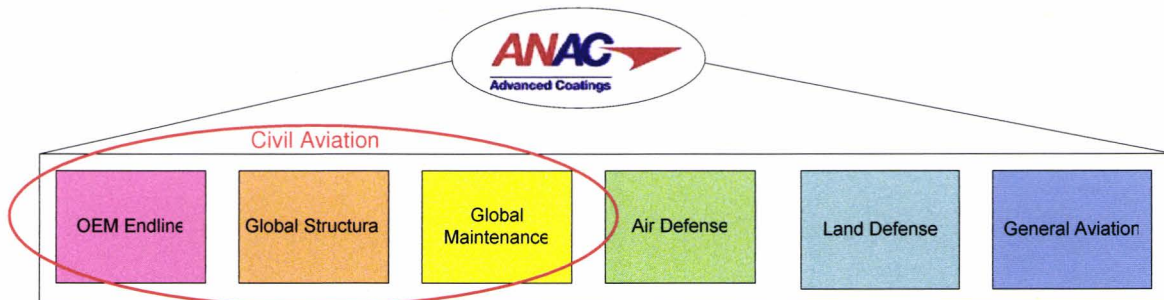


Figure 2.3 ANAC's current focus markets

1. OEM Endline

This market comprises the original equipment manufacturers (OEM) of commercial aircraft (new aircraft). The most important OEM's being Airbus, Boeing, Bombardier and Embraer. The product is applied to the exterior of the aircraft.

2. Global Structural

This market also focuses on the OEM's, but then on the interior structure of the aircraft, including all types of large and small aircraft parts. Furthermore, there are many worldwide subcontractors within this market.

3. Global Maintenance

Customers of this market are the Maintenance, Repair and Overhaul (MRO) companies and the airlines, such as for example KLM, Air France, Aeroflot, Northwest, Japan Airlines, South Africa Airways. MRO is a term used for the regular repainting of aircrafts. During maintenance the whole aircraft is stripped or sanded (the coating is completely or partially removed) and repainted. This way the aircraft can be checked for corrosion and other defects. Also regular repainting is necessary to maintain gloss and color or for livery¹ change. These first 3 focus markets are part of the civil aviation market, the name of which is interchangeable with the commercial aviation market.

4. Air Defense

This market aims at high quality coatings for military aircraft; these include combat fighters, transport, helicopters etc. This market can also be further categorized into an OEM and Maintenance segment.

5. Land Defense

This market focuses on land defense vehicles, such as jeeps, armored vehicles and tanks, which can be used on the battlefield. Important features of these coatings are that they provide general camouflage (observation by human eye), Infra Red Reflectance (observation by equipment) and CARC (protection against chemical warfare), which has a major impact on the battlefield. This market can also be further categorized into an OEM and Maintenance segment.

6. General Aviation

This market focuses on propeller aircraft like private jets and business planes. Important customers are Cessna, Dassault, Pilatus, Raytheon and Gulfstream. This market can also be further categorized into an OEM and Maintenance segment.

The OEM Endline, Global Structural and Global Maintenance roughly take up about XXX% of ANAC's turnover. They belong to the civil aviation market, also known as commercial aviation. While the Military Air, Military Land and General Aviation markets jointly take up about XXX%².

¹ Livery: The specific symbols and colors of the airline
² Source: SAP Sales Results 2006

▪ Products

Aircraft are a specific and highly technical challenge for coatings manufacturers. Aircraft need to be able to deal with temperatures ranging from -65°C in the air to +50°C on the ground, as well as having to withstand strong UV irradiation at 30,000 feet.

On the ground, aircraft coatings have to cope with various fluids which could act as a solvent, or are otherwise aggressive, such as aviation fuel, de-icing fluids, hydraulic liquids and so on. In addition, the coatings need to be resistant to the impact of dust (rain and hail) traveling at high speed, which has an effect similar to sandpaper.

The coatings also need to withstand the vibration effect of incredibly powerful engines, and aircraft hull and wing movements. Another factor to consider is that airplanes usually have to be colorful and attractive, while developing coatings that are less damaging to the environment is becoming increasingly important.

The highly regulated and extremely demanding aviation sector has seen the development of technologically advanced coatings that address these very specific needs.² The defense industry also have their own specific needs.

ANAC's product portfolio consists of roughly 300 different coating products, which can basically be divided into the following categories:

1. Primers

The function of a primer is to provide the aircraft or vehicle corrosion resistance and adhesion for topcoats.

2. Topcoats

Topcoats are designed to provide maximum protection from various chemicals, hydraulic fluids, aviation fuels, phosphate ester fluids and corrosion causing media. These topcoats are available in gloss, semi-gloss and flat finishes. Other important functions are aesthetics and recognition.

3. Specialty Coatings

There are various coatings that cannot be categorized as a standard primer or topcoat. For example special coatings that allow topcoats to be stripped with an appropriate and relatively mild paint remover without removing the primary epoxy primer. Another example is an anti-slip coating on some parts of the wing so that people do not slip in case the emergency exits need to be used. For military aircraft camouflage and infra-red detection are also important features.

The main reason why there are so many products is because each product has to comply with very **strict specifications**. OEM's and airlines each have their own set of needs and wishes. The products have their own specific characteristics with regard to components, application, physical properties etc. Typically a trade-off has to be made between certain characteristics; for example between chemical resistance and flexibility.

Another important factor is the **legislation**. There are many regulations to which the product specifications have to comply. An important one is the environmental regulation regarding Volatile Organic Compounds (VOCs). VOCs are organic chemical compounds that have high enough vapor pressures under normal conditions to significantly vaporize and enter the atmosphere. Vapors of VOCs escaping into the air contribute to air pollution.⁴ Appendix 5 shows the application positions on aircraft.

¹ Line Maintenance: covers the ongoing maintenance of aircraft, such as the daily checks and A-checks.
Base Maintenance: services for wide-bodied aircraft, as well as C- and D-checks, they include modifications to ageing aircraft, corrosion prevention programs and cabin and cockpit upgrades

² Source: VZM Management Services 2007

³ Source: Global Coatings Report 2006

⁴ Source: http://en.wikipedia.org/wiki/Volatile_organic_compound, 2007

▪ Competition

In the aerospace coatings industry **ANAC's** main competitor is PPG (with the aerospace division PRC DeSoto), but there also are a number of smaller coating producers. In December 2004 the estimated market shares are XXX% for **ANAC**, XXX% for PPG, XXX% for Mankiewicz and the remaining XXX% is for other small competitors, like Map Aero. In **ANAC's** biggest market (Commercial Aviation, Maintenance) the estimated market shares are: XXX% for **ANAC**, XXX% for PPG, and the remainder of XXX% is for the other small competitors.¹ Since ANAC does not structurally monitor market shares, accurate and reliable up-to-date market share data is not available. It is assumed that up till now market shares remained rather stable. Aggressive competitors are however expected to take over market share if **ANAC** does not take proactive measures soon.

The aerospace coatings market can be seen as an oligopoly. "An oligopoly is a market form in which a market or industry is dominated by a small number of sellers (oligopolists). Because there are few participants in this type of market, each oligopolist is aware of the actions of the others. Oligopolistic markets are characterized by interactivity. The decisions of one firm influence, and are influenced by the decisions of other firms. Strategic planning by oligopolists always involves taking into account the likely responses of the other market participants. This causes oligopolistic markets and industries to be at the highest risk for collaboration among competitors".²

The corporate landscape of the global aerospace coatings market underwent a radical transformation this millennium. Two acquisitions have brought this about: PPG's purchase of PRC-DeSoto's aerospace and sealants business, formerly owned by Courtaulds; and Akzo Nobel's purchase of Dexter Coatings, bringing together Akzo's position in the maintenance market with Dexter's strength in the OEM market and the acquisition of US Paints aircraft business.

¹ Source: Thesis S. De Bruin, 2005

² Source: www.wikipedia.org, 2007

Chapter 3. The Project

In this chapter the reason for the project, the problem scan, the problem definition and the project assignment will be described.

3.1 Reason for the Project

In 2005 the M&PC BU set its targets for the year 2010. At the core of the strategy is organic growth either within new or existing markets and regions of the world. According to the M&PC BU such an increase in the rate of organic growth requires a change of attitude and approach. Following these BU wide targets **ANAC** has set their business targets for 2010 as follows¹:

ANAC Business targets for 2010

- Grow global sales by €XXX million (EMEA by €XXX million to €XXX million)
- Improve Return on Sales (ROS) to XXX%
- Downsize the Operating Working Capital (OWC)² to XXX%

The strategy to achieve the targets set for 2010 are summarized as follows by the General Manager **ANAC** EMEA:

- We need to decide what the market opportunity is.
- We need good information about where we are today.
- Each area will be challenged to come up with what we can do to achieve this growth.
- All functional areas are to be challenged to deliver their targets faster and at lower cost.
- Operating working capital has to be reduced.
- We need to manage this program in a systematic way. We will use the Business Improvement methods to do this. It will become a way of working for us in many things we do.

In order to help create this growth, numerous Business Improvement programs have been launched or are on the verge of being launched. These programs have the aim to make the BU more systematic in how to organize processes and projects and to come to decisions in a more scientific way. This will help people to look at the current situation from a different perspective and provide a systematic way of improving the business.

To achieve substantial and sustainable growth it is vital that ANAC knows the market thoroughly. Currently ANAC does not have the required market information nor does it have the culture, structure and processes to systematically qualify and quantify its markets. The objective of this study is to improve ANAC's market orientation, specifically by providing recommendations for its organization culture, structure and information processes.

¹ Source: ANAC EMEA Communication session 2007

² OWC: a financial metric which represents the amount of day-by-day operating liquidity available to a business. It is calculated as current assets minus current liabilities.

3.2 Problem Scan and Definition

To define the problem several steps were taken. Specifically interviews with **ANAC** employees provided good insights to define the problem issues, but also desk research on literature, reports and documents was carried out extensively (see **chapter 4.4** methods and techniques).

An Affinity diagram¹ and Interrelationship diagram² was used to structure the symptoms involved and narrow down the problem and related issues.

Current problem issues:

✚ Organizational Culture

ANAC's culture can be characterized as highly sales-driven, and in which a short/tactical term rather than a long term market-driven orientation prevails. 'We sell what we can sell', without first thoroughly analyzing where the best market opportunities lie, sometimes is the case.

There is a reliance on historically successful approaches to face new problems/opportunities and the common understanding of what **ANAC** is trying to accomplish and how, needs to be improved.

Decisions are mostly not based on facts but rather on opinions and feelings. **ANAC** therefore wants to shift its culture from opinion-based to fact-based, according to the goals set in the Creating Growth brochure. **ANAC** culture needs to become more market oriented, which is slowly beginning to happen.

✚ Organizational Structure

ANAC's organizational structure needs to be aligned with the desired market-oriented culture. To be able to adequately anticipate developments in the market, maintaining the current organizational structure will not suffice and important changes are required.

The **ANAC** organization has no clear marketing function. At the moment, marketing activities are, to some extent, carried out by other functional departments and functions. This is done in an unstructured manner, in which roles and responsibilities regarding market intelligence have never been made explicit. As a result, **ANAC** cannot effectively anticipate market developments and monitor its customers and competitors. To systematically generate, disseminate and use market information, changes are needed in **ANAC's** organization structure.

✚ Information Systems and Processes

ANAC does not have adequate information systems and processes to support the generation, dissemination and use of market information.

ANAC has SharePoint in place, which is a web based IT-program to share information between authorized people/staff. SharePoint is however not commonly used because the skills for using it have not been mastered, people do not see the benefits of it, and/or people find it time-consuming. SAP is (amongst others) used for hard accounting, sales and customer complaints data, but does not capture adequate market information to aid decision-making processes. Atlas is a database that contains detailed information on all registered aircraft. This data is, however, not used to support strategic decision making, but is used rather on an operational level to support sales leads.

¹ Affinity diagram: The affinity diagram was used to organize and consolidate the verbal information during the orientation phase. Opinions and remarks from involved ANAC employees regarding current problems were written down and grouped into clusters. Source: The Process Manager (1994).

² Interrelationship diagram: The purpose of the interrelationship diagram was to depict the relationship between the clusters identified by the affinity diagram. The more influence a certain problem issue (cause) has over the other issues (effect) the higher upstream the problem is placed in the graph. Source: The Process Manager (1994).

▪ **Difficulties to make Market-Based Decisions**

ANAC does not qualify and quantify the coatings market in a structured manner. Market information is scattered throughout the organization and much of the market information, when available, often resides inside people’s heads. Consequently, decision-making processes on company strategy and marketing issues (e.g. which markets to target, which products to develop, when to launch the product to the customer) cannot be carried out effectively.

▪ **Inadequate Anticipation of Developments in the Market**

The previous issues all impact the way in which **ANAC** anticipates the market. Since **ANAC**’s culture is not market oriented, it does not have a marketing department and formalized market information processes, **ANAC** cannot adequately anticipate on market needs and opportunities. As a result **ANAC** runs the risk of failing to reach their long-term business goals and will be vulnerable for increasing competitive pressure.

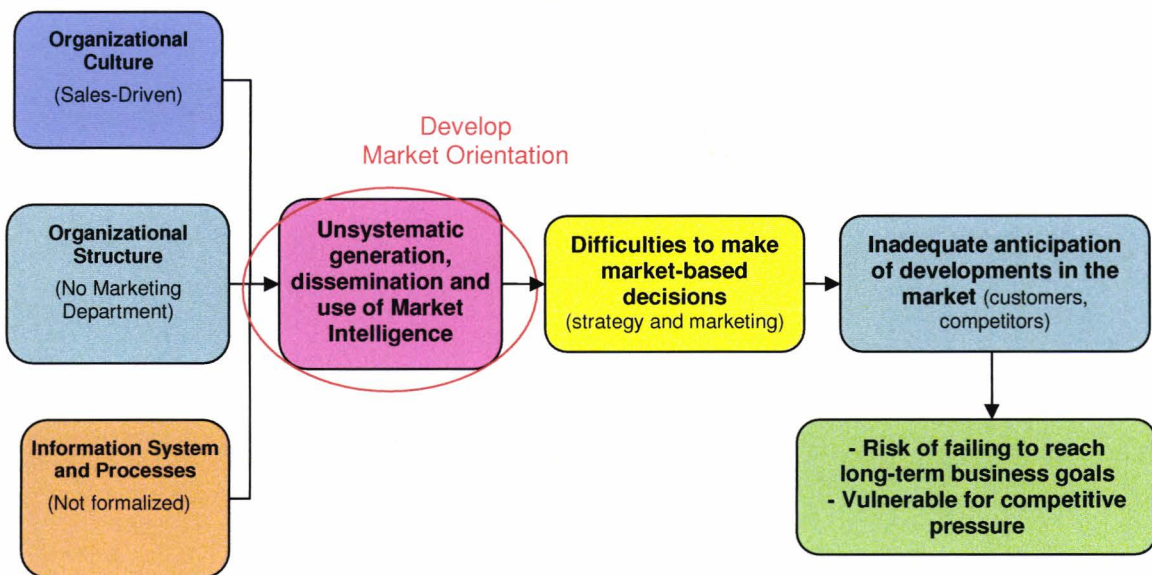


Figure 3.1 Schematic depiction of current problem issues and effects

Need to Develop Market Orientation

If strategic plans lack underpinning, market information is required and the organization needs to be adjusted. Research revealed that **ANAC** currently lacks market information and also the market orientated culture, structure and processes to obtain and use this information for the coatings market. As a result **ANAC** runs the risk of failing to anticipate on market developments, reach its long term goals and losing market share to aggressive competition. See **figure 3.1**.

Drawing on marketing and strategic literature creating a market-oriented company will help. A market-oriented culture and adequate market information is critical for a business’s competitive strategy and can help the company reach its goals. Kohli and Slater (1990) have defined market orientation as “The ability of the organization to *generate, disseminate, and use* superior information about customers and the competitors.”

Problem Definition

ANAC does not have the culture, structure and processes to systematically generate, disseminate and use market information in order to make market-based decisions on company strategy and marketing issues. As a result **ANAC** runs the risk of failing to anticipate developments in the market, reach its ambitious business goals and will be vulnerable for increasing competitive pressure.

3.3 Project Assignment

The aim of the project assignment is to find a solution for the problem definition. The project assignment is defined as follows:

Project assignment

*Recommend how **ANAC** should improve its organization in order to become more market orientated and better able to make market-based decisions on company strategy and marketing issues. As a result **ANAC** will be better capable of anticipating developments in the market, obtaining the set goals and meeting the competition.*

Deliverables will include a road map to create a market-oriented culture, a concept design for a new organization structure and a system design for collecting, analyzing and disseminating market information.

Problem Owners

The project is executed at **ANAC** EMEA (region Europe Middle-East & Africa) location Sassenheim, The Netherlands, and will be under supervision of Robert van Kooperen and Tsjip Boersma, Product Managers of **ANAC** EMEA. Kees Bodegom is the successor of Robert Van Kooperen and is also an important stakeholder in the project.

The solutions will benefit the **ANAC** organization as a whole, including its functional departments, who can then better anticipate the market and meet their long term goals. More specifically General Management will be able to make better market-based decisions on company strategy and marketing issues; R&D and Product Management can better develop and introduce products that will satisfy customer needs; The Sales force will be more capable of targeting the best market opportunities and will be better informed about finding customer-specific solutions.

Ian Walker, the general manager of **ANAC** EMEA, will be the key person responsible for the evaluation and follow up of the provided recommendations. He has the authority to implement changes within the organization of the EMEA region and reports to the general manager of **ANAC** Global.

This project provides extensive research on why and how **ANAC** should become market oriented. As such, it should support the vision of the general manager **ANAC** EMEA to bring about changes, and will provide valuable measures on how **ANAC** EMEA can reach its business goals. In turn this should ultimately lead to the implementation of global changes by the global management team.

Project Criteria

The project at **ANAC** needs to comply with the following conditions:

- **Time resource**
The available time for the project is 9 months, full-time. The project started on March 5th 2007 and the final presentation is given in January 2008.
- **Design**
The recommendations need to comply with the predefined design specifications and boundary conditions. The concept designs need to be scientifically justified and deliver a solution to root causes and therefore to the problem.
- **Implementation**
It has to be specified how the design can be implemented. The design needs to be practical and fit to the organization at hand, **ANAC** EMEA. The design should ideally be tested for practicality, for instance through tests, judgment of the company or actual implementation.

Chapter 4. Research Approach

In this chapter the research approach is described. First the research model, then the research questions that were used. Next to this, the methods and techniques used during the project are described.

4.1 Research Model

A research model structures the project and helps find a specific solution for the problem that was defined. The approach used draws on Van Heesch¹ since this model gives a comprehensible overview of how the research was designed and structured.

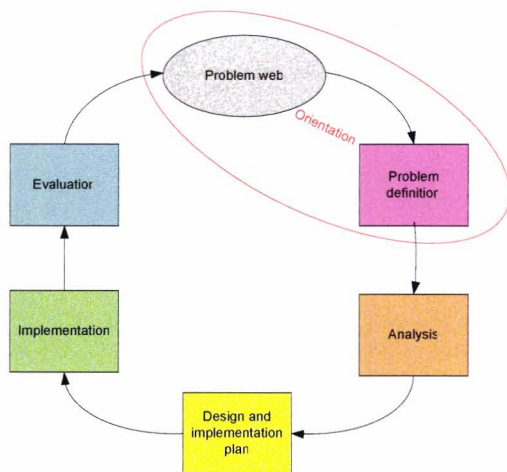


Figure 4.1 Regulative cycle (Van Strien, 1975)

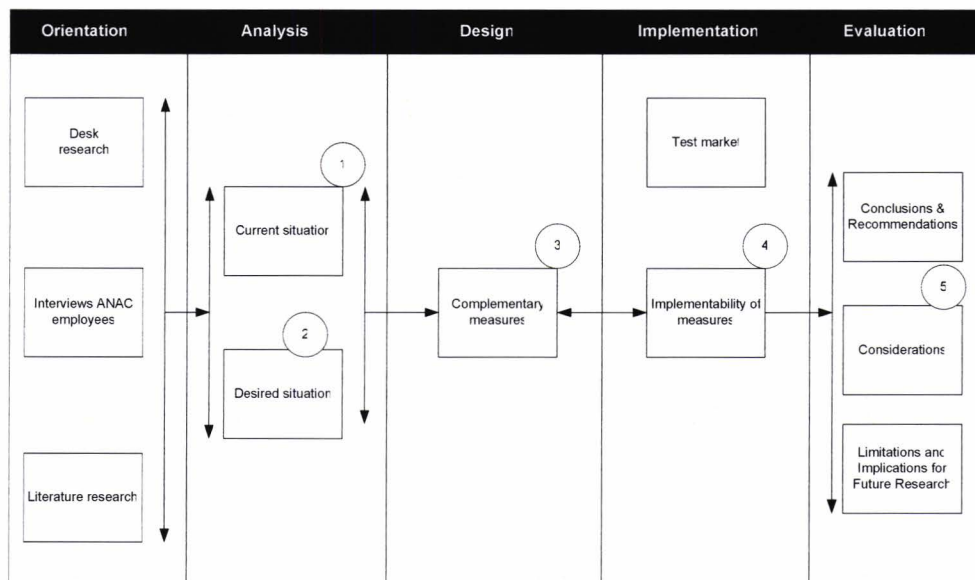


Figure 4.2 Research model (Verschuuren and Doorewaard, 1995)

¹Note: The research model that is used is a combination of the regulative cycle of Van Strien (1975) and the research design elements of Verschuuren and Doorewaard (1995)

The orientation phase was used to identify the problem web and come to a problem definition by performing desk research and orientation interviews.

In the analysis phase a further elaboration was done on the outcomes of the previous phase. The current situation became clearer and the desired situation was determined. Analysis of organizational science, marketing and market orientation literature provided important input for the design phase.

In the design phase the market orientation measures are provided. This design phase ran (partially) parallel to the implementation phase in order to validate certain measures in incremental steps. One current focus market was used as a test arena.

In the evaluation phase the conclusions and recommendations regarding the complementary market orientation measures are given. Next to this the limitations and implications for future research will be given. The chapter personal reflection will review the total project, comment on potential drawbacks of the project and reflect on the interaction with **ANAC** employees.

4.2 Research Questions

Several research questions have been formulated. They help address the problem in a structured and partial way. The numbers depicted in the research model correspond to the following research questions. These questions need to be answered in the corresponding phase.

Q	Phase	Question
Q1	Analysis	How can existing organizational science and market orientation literature help ANAC in becoming more market orientated?
Q2	Analysis	Where is ANAC now and what should be its desired direction?
Q3	Design	Which measures will help ANAC in becoming more market orientated?
Q4	Implementation	How should the market orientation measures be implemented, and what will be the likelihood of implementation?
Q5	Evaluation	What are the conclusions, recommendations and considerations for ANAC ?

4.3 Methods and Techniques

This paragraph describes how the research was carried out. Personal interviews with involved **ANAC** employees formed the basis for the data collection and analysis. Next to this, secondary data analyses of reports and documents and literature research contributed to the insights described in this thesis.

Desk research

Desk research concerns collecting and analyzing data that have been made available by others. One of the advantages of desk research is that it can be performed for a large part without any assistance of other people, in contrast to interviews. The most important sources for research were Akzo Nobel's Intranet, annual reports, websites concerning the coatings industry, aerospace market outlook documents, company presentations, product brochures, earlier research performed by graduate students and consultancy companies. Also useful data available in SAP and the Atlas database was collected and analyzed.

The desk research data collection method is valid as various data sources were used. The reliability of the data is ensured since the following questions were constantly kept in mind: How old is the information that has been found? Despite the age of the information, is it up to date enough? Is the information source reliable enough? Is the information mutually comparable?

Next to desk research on reports and documents, literature research on (scientific) articles and textbooks played an important role in this project. The validity of the literature research is high, as scientific articles were selected that best fit the research. When it comes to literature research, the reliability of the data generally strongly depends on the selected literature. In order to assure this reliability recent peer-reviewed articles were used. Next to this, organizational and marketing textbooks have contributed to the theoretical support of the project. The concepts available in literature are combined to provide **ANAC** solid recommendations. See the literature list.

Interviews

Data was obtained by interviewing a cross section of employees, both vertically and horizontally. The majority of the interviewees have been working for **ANAC** for many years. Interviewees were selected on the basis of their relevance to the project (knowledge, authority, support); all members of the management team, which included the general manager of **ANAC** EMEA and 6 functional department managers (sales, product management, operations, R&D, logistics and finance), and various people from the sales, product management and R&D department. Appendix 7 provides the interviewee list with names, functions, contact frequency and specific topics.

The interviews typically lasted between half an hour and an hour-and-a-half. Interview frequency ranged from once (e.g. business analyst MIPS) to almost weekly contact (company supervisor).

Next to these formal interviews, informal conversations provided useful insights, especially with regard to social, emotional and political issues. Questions asked during the orientation phase were broad natured in order to identify the problem issues as objectively as possible.

After the orientation phase, the selected interviewees were interviewed in a semi-structured manner. A semi-structured interview is flexible, allowing new questions to be brought up during the interview as a result of what the interviewee says. This makes it possible to ask in-to-depth questions and makes it less likely that important issues will be overlooked.

The theme during the analysis and design phase was to find answers to the research questions. Once the project assignment was focused on the development of **ANAC's** market orientation, questions were formulated around this concept. Appendix 8 provides the core questions asked during the semi-structured interviews. These questions relate to the market orientation concept found in the literature research (that is, the ability of the organization to generate, disseminate and use market information).

Notes were taken during the interview, which were rewritten to form an integral part directly after the interview. They were then handed to the interviewee to receive possible remarks or additions for validation purposes.

The personal interviews served multiple purposes. Apart from generating valuable information, they were also used to exchange thoughts, make people actively think about issues they never thought about before and create support.

Since all **ANAC** employees were asked the same core questions around the concept of market orientation and the organization, the validity of the interviews is high. The reliability of the interviews is fairly high, as the answers to these questions in general showed great consistency. In some cases people's comments differed from each other. For example, one person thinks marketing does not add value to the organization, while another one is an advocate of implementing a marketing department. Answers that were consistent were taken into this report, while answers that could not be acknowledged by other sources were omitted. Over time most of these inconsistencies were resolved. For example, before the project started, certain people did not agree with **ANAC** having a rather short term sales-driven orientation. After some time and specific actions (such as the preliminary presentation) people changed their mindset and actually shared the viewpoint of the rest of the organization (see also **chapter 8** Limitations).

Furthermore, personal statements were, where possible, verified with desk research. For instance, statements such as "We are showing steady growth in market x" or "The top 10 airlines consist of..." were checked by performing desk research on SAP and the Atlas database.

Chapter 5. Market Orientation Theory

This chapter gives an elaboration on the concept 'market orientation'¹ by drawing on scientific literature. Market orientation is a foundation of marketing and is increasingly important in other fields, such as strategic management. The following questions will be answered:

- What is Market Orientation?
- Why become Market Oriented?
- How to become Market Oriented?

The theory on market orientation forms a basis for the recommendations provided in **chapter 7**.

5.1 What is Market Orientation?

In their literature various authors attempt to define market orientation;

- "Market orientation represents superior skills in understanding and satisfying customers."²
- "A set of beliefs that put the customer's interest first."³
- "The ability of the organization to generate, disseminate, and use superior information about customers and the competitors."⁴
- "The coordinated application of interfunctional resources to the creation of superior customer value."⁵
- "The set of cross-functional processes and activities directed at creating and satisfying customers through continuous needs-assessment."⁶

There is substantial consensus regarding the fact that a company cannot be defined as market oriented unless it disseminates and utilizes information on at least two categories: customers and competitors (see **figure 5.1**). "Customer orientation is the sufficient understanding of one's target buyers to be able to create superior value for them continuously" (...) "Competitor orientation means that the seller understands the short-term strengths and weaknesses and long-term capabilities and strategies of both the key current and the key potential competitors."⁵ Together with interfunctional coordination these three behavioral components will focus on long-term profitability.

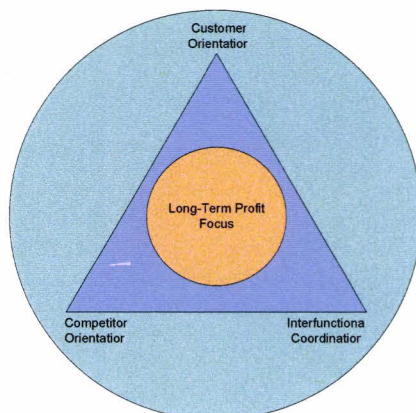


Figure 5.1 Market Orientation⁵

¹ Note: The terms *market orientation*, *market driven* and *customer focus* can be used interchangeably according to Shapiro (1988), Deshpande and Webster (1989) and Deshpande, Farley, and Webster (1992)
² Source: Day (1999)
³ Source: Deshpandé, Farley, and Webster (1993)
⁴ Source: Kohli and Jaworski (1990)

- ⁵ Source: Narver and Slater (1990)
⁶ Source: Deshpandé and Farley (1998)

5.2 Why become Market Oriented?

“A substantial market orientation must be the foundation for a business’s competitive advantage strategy”¹. To attain sustainable competitive advantage, **ANAC** must utilize market knowledge. Generating knowledge that is not utilized in marketing decisions and activities does not produce competitive advantage.

Research showed that “an external focus stimulates new ideas and responsiveness to markets”² and that the “implementation of a market orientation leads to improved financial and marketing performance.”³ Financial performance relates to its return on sales and investment and level of profitability compared to the industry average. Marketing performance reflects the organization’s performance in terms of sales and market share compared to industry averages.

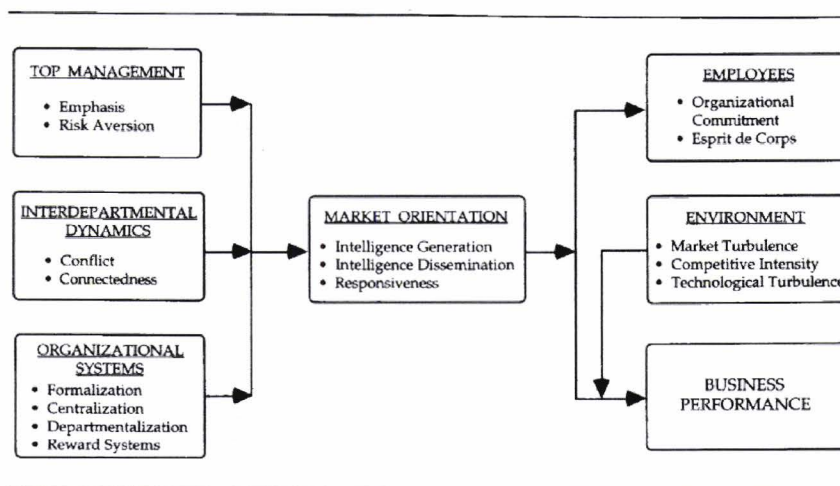


Figure 5.2 Antecedents and Consequences of Market Orientation³

Studies showed that regardless of the market turbulence, the technological turbulence, or competitive intensity in which a company operates market orientation has an impact on business performance⁴. Companies should strive to improve their market orientation, in order to attain higher business performance. See **figure 5.2**.

5.3 How to become Market Oriented?

Creating a market orientation requires dramatic changes to an organization’s culture and the creation of organizationally-shared understandings. Research on organizational change suggests that though formal actions such as changing organizational structures and incentives are an important road to change, the change process is much more complex.

Research⁵ shows that the process of creating a market orientation occurs over four distinct stages: (1) initiation, (2) reconstitution, (3) institutionalization, and (4) maintenance (**figure 5.3**).

- ¹Source: Narver & Slater (1990)
²Source: Day (1994); Hult (1998); Kohli and Jaworski (1993); Sinkula, et al (1997); Narver and Slater (1994)
³Source: Green Jr et al (2005)
³Source: Kohli and Jaworski (1990)
⁴Source: Kohli and Jaworski (1993)
⁵Source: Gebhardt et al (2006)

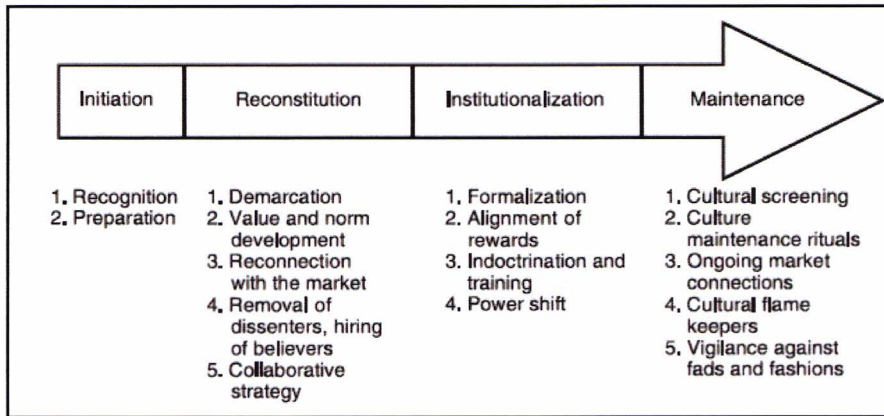


Figure 5.3 Four stages for creating a market-oriented culture¹

Research indicated that top management and interdepartmental dynamics have an impact on the market orientation. Top management focus is needed to bring about a market orientation, together with a certain degree of risk taking on the part of senior managers. Interdepartmental conflict appears to reduce a market orientation, whereas connectedness appears to play a facilitative role. Next to that it is suggested that market-based reward systems should be taken into account to improve the market orientation. "Although formalization and departmentalization do not appear to affect a market orientation, it would seem that the content of formal rules, rather than their mere presence, is a more important determinant of market orientation."²

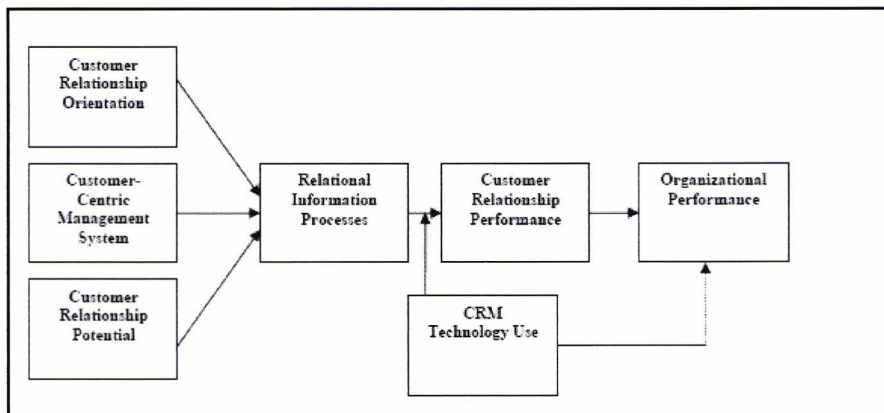


Figure 5.4 CRM Framework³

To maintain customer relationships, in addition to creating an organizational culture and environment that fosters the sharing of information between a company and its customers, it is vital that the company uses this information to adequately respond to customers needs. Customer information is the raw material to provide insights and develop strategies to maintain and sustain relationships.³ (figure 5.4)

Overall, "market orientation allows a company to attain positive results only if the company achieves two general aims. Firstly, it must adopt cultural traits supporting the market orientation. Secondly, it must develop resources, capabilities, organizational design and systems capable of translating the philosophy of the marketing concept into a consistent set of processes, activities and behaviors."⁴

The recommendations to make **ANAC** more market oriented draw on these literature findings. See **chapter 7**.

¹Source: Gebhardt et al. (2006)
²Source: Kohli and Jaworski (1990)
³Source: Jayachandran et al (2004)
⁴Source: Troilo (2006)

Chapter 6. Results

This chapter provides the results of the qualitative explorative research carried out to provide more insights on the problem and context to come to adequate solutions. The methods used for this research can be found in the previous chapter.

For any change to take place, an organization must first perceive a gap between its *current* and its *desired* situation. Therefore **ANAC's** current organization structure and processes will firstly be described. This will, amongst others, be done by describing the stage of growth they are in and by making comparisons with industry related companies through the corporate life cycle model.

Furthermore, this chapter describes the way **ANAC** handles the generation, dissemination, and use of market information. The desired situation comments on the direction in which **ANAC** needs to move in order to become market orientated in the future.

Current and Desired Situation

ANAC's current and desired situation is described by making use of the organizational life-cycle model¹; in other words *where does ANAC come from? Where is it now? And what do the answers to these questions mean for where it is going?* The life-cycle model consists of the following 5 common stages: birth, growth, maturity, revival, and decline. Each of these stages has its own characteristics regarding strategies, structures, contexts, and decision-making styles. These 5 phases will first be shortly described after which a more detailed elaboration is given on the stage in which **ANAC** resides and the desired stage it will need to go to.

1. Birth Phase

This is the period in which a new firm is attempting to become a viable entity. The prime distinguishing characteristics of the firms in this phase are that they are young, small, dominated by their owners and have simple and informal structures.

2. Growth Phase

In this phase the emphasis is on achieving rapid sales growth and assembling resources in an attempt to realize advantages on a larger scale. Typically, a functionally based structure is established, some authority is delegated to middle managers, and procedures are formalized.

3. Maturity Phase

Sales levels stabilize, the level of innovation falls, and a more bureaucratic organization structure is established. The goal becomes smooth and efficient functioning.

4. Revival Phase

This is typically a phase of diversification and expansion of product-market scope. It shows firms adopting divisionalized structures for the first time in order to cope with more complex and heterogeneous markets. Furthermore, there an emphasis upon more sophisticated analysis, control and planning systems.

5. Decline Phase

Stagnation as markets dry up and firms begin to decline with them. Profitability drops because of the external challenges and because of lack of innovation.



¹ Source: Miller and Friessen (1984), A Longitudinal Study of the Corporate Life Cycle. A series of histories were constructed on 36 well known corporations that have been in existence for a long period of time (at least 20 years).

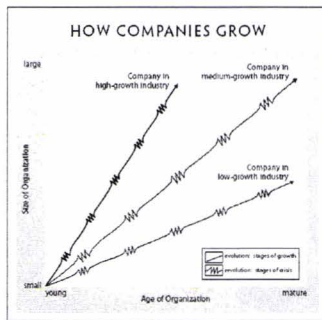


Figure 6.1 How companies grow (Greiner, 1998)

Where does ANAC come from?

The table below briefly enumerates the most important milestones in **ANAC's** history. These will not be handled in further detail and a focus is placed on the current and desired situation of **ANAC**, as they provide the relevant context in which the problem will be solved.

ANAC's history

1930	Sikkens begins supplying Aeroflex butyrate dopes for use on fabric covered aircraft
1960	Sikkens begins to export to maintenance sector primarily
1990	Dexter Corporation acquires Crown Metro
1993	Akzo Nobel and Dexter form a joint venture, Akzo Dexter Aerospace Finishes (ADAF)
2000	Akzo Nobel acquires Dexter Coating Systems to form Akzo Nobel Aerospace Coatings (ANAC)
2002	Akzo Nobel Aerospace Coatings acquires U.S. Paint and the Alumigrip topcoat brand
2005	Akzo Nobel Aerospace Coatings celebrates its 75 year anniversary
2006	Akzo Nobel Aerospace Coatings introduces a new corporate identity with a new logo

Table 6.1 ANAC's history

Maturity and Revival Phase

The characteristics of the phases previously mentioned have been compared with **ANAC's** current status and reveal that **ANAC** at this time shows the most similarities with companies being in the *maturity phase*. However as will be seen later, **ANAC** is on the verge of transition to the *revival phase*. Some common characteristics of this phase even have already (partly) taken place in the current situation. Other characteristics need an active design of change. Before looking at where **ANAC** is going to or needs to go to, the current status is described and compared by means of the features strategy, situation, structure and decision making.

For each of these features, statements are depicted that generally hold true for companies in the maturity and revival phase. In diagnosis certain relevant statements will be acknowledged, further explained or invalidated for **ANAC** specifically.

6.1 Current Situation: Where is ANAC now?

1. Strategy: Maturity Phase

"Firms in the mature phase are conservative. They do not perform many major innovations, engage in very few efforts at diversification or acquisition, and fail even to make many incremental changes to the products or services being offered. Indeed, the tendency, more than in any other phase, is to follow the competition; to wait for competitors to lead the way in innovating and, then, to imitate the innovations if they prove to be necessary."

Markets are slightly broader than in the growth phase and there is a corresponding reduction in the number of firms opting for a niche strategy. Devoted attempts are made to arrange for a stable,

negotiated environment by fixing prices and lobbying with the government. The goal appears to be to improve the efficiency and profitability of operations.

A stable and circumscribed product line is sold in traditional markets, the emphasis being upon economical production and the preservation of sales volume. As predicted, mature firms have a slacker pace than those in the exhausting growth phase.¹

Diagnosis

These statements also hold true for a large part in **ANAC's** case; although **ANAC** does indeed spend a lot of resources on Research & Development and new products are being introduced in the market, they have been quite conservative in certain product market combinations. In for example the highly profitable cabin coatings market, in which competitor Mankiewicz shows a strong performance, **ANAC** has, until now, not made adequate resources available to attack this market. This can become a serious threat if Mankiewicz also steals customers in other product market combinations since they can offer them the 'complete package'. Furthermore, **ANAC** has focused its attention mostly on the OEM Endline and Maintenance market.

The competitive environment has indeed been very stable over the course of time; **ANAC** and PPG have been the 2 two major players in the aerospace coatings market for decades now. However companies such as Mankiewicz and Deft are becoming more and more competitors to seriously take into account. **ANAC** does not seem to be proactive or even reactive to certain successful competitors' products (e.g. PPG with their sealants and Mankiewicz with their cabin coatings). Also environmental regulations and legislations that are becoming stricter make it necessary to be able to adapt. The statements about price fixing and lobbying do not hold true in **ANAC's** case.

Stable product types as Aviox and Aerodur are good quality products that are delivered on a continuous basis to a whole range of customers mainly based within the Commercial OEM and Maintenance market.

In brief:

- **In some cases ANAC has a quite conservative strategy**
- **Low anticipation on competitors' strategies**
- **Stable product types in traditional markets**

2. Situation: Maturity Phase

"Firms are older and larger than those in either the birth or the growth phases. Also, do they have a substantial size advantage over most competitors.

Markets are not much more heterogeneous than in the growth phase but they are a good deal more hostile. This is usually the case in a mature industry where the total market is no longer growing. The competition is all going after the same group of customers, some of them with considerable diligence. As we hypothesized, the challenges increase once again during the maturity phase.¹

Diagnosis

ANAC celebrated its 75 year anniversary in 2005. It currently employs around XXX people worldwide (headcount of regions Americas and EMEA both around XXX people and Asia-Pacific XXX). As mentioned before, **ANAC** indeed has considerable size advantage over most of its competitors being the market leader in the aerospace coatings market, a position they more or less share together with PPG. A meaningful quote registered during one of the interviews was: "*We have become too big for the napkin and too small for the table-cloth*" (literal translation from a Dutch expression). The interviewee wants to indicate that **ANAC** has grown so fast during the last few decades that it currently does not have an adequate structure and lacks formalized procedures for a company of this size.

ANAC's growth has been based for a large part on the Commercial OEM market, but there comes a point when it cannot rapidly grow in this market anymore and has to focus on other areas. The competition is active in the same customer groups or even outperforms **ANAC** in other areas.

¹ Source: Miller and Friessen (1984)

Currently there is no solid information on how large the total aerospace coatings market is and with what rate it is growing. Rough indications predict a market size of 250 million Euros: this has, however, not been thoroughly researched.

ANAC is facing a rapidly changing market; Airbus is moving their assembly facilities to China, introduction of composites, European REACH legislation, weakness of the American Dollar, aggressive upcoming competitors (Mankiewicz, MAPAERO, BASF).

In brief:

- **Market leader in aerospace coatings market**
- **Slackening growth rate in traditional markets (Commercial OEM)**
- **Stable competitive environment until now, but competitive pressure is rapidly increasing**
- **Unknown total market size potential**

3. Structure: Maturity Phase

“Structures are in some ways similar to those found in the growth phase. Departmental, functionally-based structures prevail since they continue to suit the focused product-market scope. By now, firms are usually run by professional managers who are somewhat more in favor of a participative management approach. Nonetheless, firms do remain fairly centralized.

Information processing activity changes in several key ways—there is more emphasis upon formal cost controls, budgets, and performance measures. This seems to be due to the need for producing things efficiently and earning adequate profit margins in a competitive market.

Efficiency seems to become a substitute for innovation in mature markets and this requires effective financial controls. Ratings for variables such as scanning, communications, technocratization and differentiation are similar to those of the growth phase, though they usually increase slightly to cope with the tougher administrative task.”¹

Diagnosis

Within the 3 regions **ANAC** indeed has a functionally based structure which consists of the departments Finance and IT, R&D, Sales, Operations, Sales, Logistics and Product Management by which all the focus markets are served. The structure will further be described through the market orientation features generation, dissemination and use of market intelligence.

¹ Source: Miller and Friessen (1984)

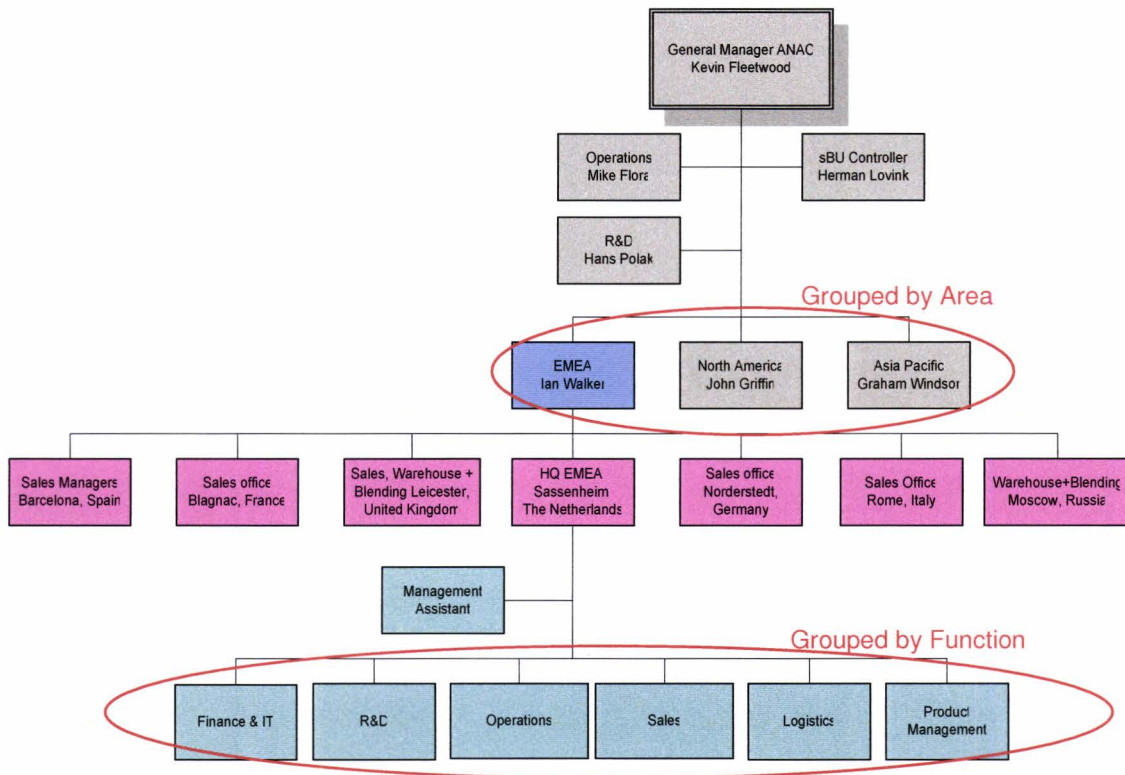


Figure 6.2 ANAC EMEA Organization Chart

Generation of Market Intelligence

ANAC currently does not specifically define which market intelligence is needed to qualify and quantify the market. Information needs are now mostly based on personal experience and skills.

Within **ANAC** there is no process that clearly defines how to gather market information and who is responsible for gathering it. Furthermore there is no specific marketing department within **ANAC** that could fully allocate their resources to market research and other marketing activities. However, a Market Intelligence & Product Support Group of Akzo Nobel (MIPS) does exist, located at the Sassenheim site - that can be requested to perform certain market research/analysis. **ANAC** was, however, not satisfied in the past with the quality and usefulness of this data (see **chapter 7.2.1**). The market intelligence generated should be relevant, accurate and reliable. Furthermore, the development of new products can take several years. Because of this not only current needs have to be identified, but also it is vital to take future trends and needs into account.

Currently, the primary source of market information concerning the coatings market is the Sales department. As a sales manager remarked: "Sales managers are being seen as the primary source for market research, but I'm questioning whether this is the best way." Sales managers indicated that market information is typically gained through customer visits, Internet, third party information and for a significant part also on gut feeling. Market information is based on relative ad-hoc data collection. The 4 area sales managers working at the Sassenheim site each have their own set of countries for which they are responsible (see **figure 6.3**). Next to this **ANAC** has sales offices in the United Kingdom, Germany, France, Italy, Spain and Russia. Within their own area each sales manager offers the complete product range of **ANAC**, ranging from civil to defense markets.

Other departments that have contact with the market are Research and Development (R&D), Product Management, Logistics, Customer Service and the General Manager (Operations and Finance & IT have almost no contact with the market and serve a supporting role). The intelligence generation processes are quite fragmented throughout the organization and are not clearly defined. The department of Product Management has gradually moved into the role of handling certain market

information. This happens (in some situations) in conjunction with the Sales department. This role has however never been made explicit, which makes it difficult to assign real responsibilities. The Product Management department will play an important role in the redesign of the organization. **Figure 6.4** therefore depicts the current organization chart.

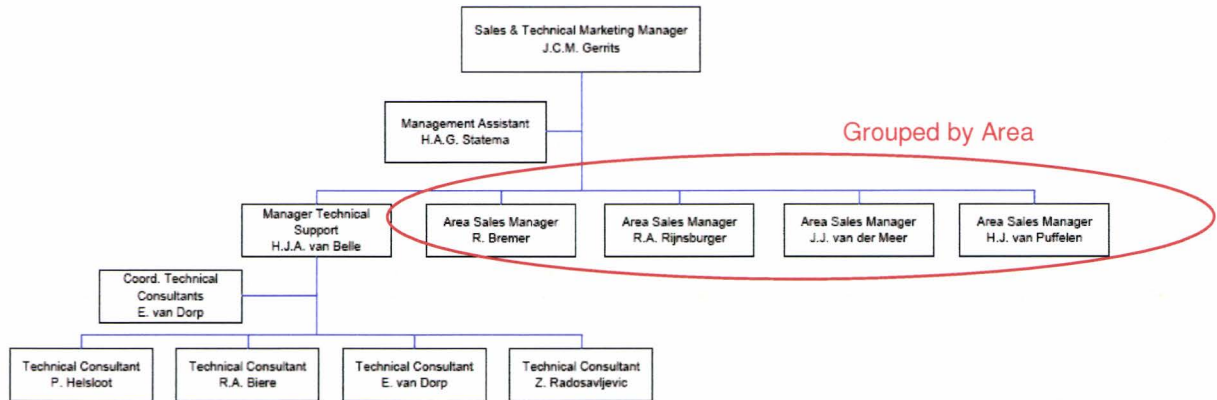


Figure 6.3 Organization Chart Sales

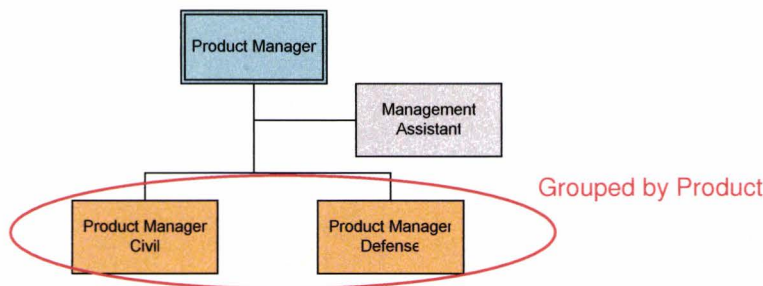


Figure 6.4 Organization Chart Product Management

It can be stated that **ANAC** currently does not have the necessary skills (“I don’t have the appropriate marketing background for this”), attitude (“I don’t see the use of it”), time (“I’m already loaded with work”) and/or procedures (roles and responsibilities have not been clearly defined) in place to generate the required intelligence in a structured manner.

Also the characteristics of the focus market determine the complexity of gathering market intelligence. In, for example, OEM Endline **ANAC** can obtain project lists from Boeing and Airbus on future aircraft production orders with a 10 year outlook. Such outlooks are a lot harder to obtain from for example the land defense market.

In brief:

- **ANAC is grouped by region and function**
- **No global marketing department**
- **Primary source for market information is the sales department**
- **ANAC does not have the necessary skills, attitude, time and/or procedures yet to systematically generate market intelligence**
- **Characteristics of focus market impact upon the complexity of generating market information**

Dissemination of Market Intelligence

It is not defined what market information needs to be disseminated and stored and who is responsible for the dissemination and storage. Information is often merely stored in people’s heads. **ANAC** makes use of SharePoint. This is **ANAC’s** intranet site on which authorized employees can store and share gathered information. The use of SharePoint is however not common practice yet. Potential reasons

for this could be that the skills for using it have not been mastered by the people; people do not see the benefits of it (yet) and/or people find it time consuming etc. Hard accounting and sales data are entered into SAP database. They also keep track of customer complaints.

Depending on the focus market, sometimes a formalized process does not exist for sharing market information within regular team meetings. OEM meetings are for instance far more structured than the Military land market. Next to the human interaction, the sharing is also complicated due to the fact that the IT programs currently used to retrieve data require a high amount of technical computer skills.

ANAC has the following management teams in place that come together a few times a year to discuss operational and/or strategical issues:

- a. EMEA Management Team (EMT), focus on operational issues (6 times/year) and consists of the following members:
 - General Manager EMEA
 - Sales & Technical Marketing Manager (Sales)
 - Global Controller (Finance)
 - Global Technical Manager (R&D)
 - Product Manager EMEA (Product Management)
 - Logistics Manager EMEA (Logistics)
 - Operations Manager EMEA (Operations)
- b. Global Management Team (GMT) (4 times/ year) consists of the following members:
 - General Manager ANAC
 - General Manager EMEA
 - General Manager Americas
 - General Manager Asian Pacific
 - Global Controller
 - Global Technical Manager
 - Global Operations Manager
- c. Global Strategic Marketing and Technical Group (SMT), focus on strategic issues (4 times/year)
 - General Manager ANAC
 - General Manager EMEA
 - General Manager Americas
 - General Manager Asian Pacific
 - Global Technical Manager
 - Sales & Technical Marketing Manager
 - Product Manager EMEA
 - Product Manager Americas
 - Regional Manager, UK, Ireland, Germany & Austria

In brief:

- **No formal procedures for dissemination and storage of market information**
- **Market information is often merely stored in people's heads**
- **SharePoint is not commonly used**
- **ANAC has various management teams in place**

Use of Market Intelligence

Ottum and Moore (1997) have shown that for the processing of market information, one must successfully complete gathering, sharing and using in order to be successful. It is often the last event that separates the winner from the rest of the competition.

ANAC does not generate and disseminate market information in an adequate manner; as a result market information cannot be used effectively either. See also Decision Making Style.

In the beginning of the project, marketing has merely been seen as “developing sales brochures” or “deciding on which company gifts we should hand out”, operational issues. Members of the organization are however slowly beginning to realize that marketing contributes to much more than that, especially with regard to developing adequate business strategies.

4. Decision Making Style: Maturity Phase

“Conservatism becomes the norm. The maturity phase shows a style of decision making which is less innovative, less proactive, and more risk averse than in any other phase. The aim is to not rock the boat-to focus upon efficiency rather than novelty. As a consequence, decisions become somewhat less responsive; less adaptive to market forces. This might be one reason why performance seems to be lower in the maturity phase than it is in the growth phase.

The level of analysis in decision-making is much like that in the growth phase. The professionalization of management and the increased complexity of the departmental structure cause there to be a more careful weighing of decision alternatives in the growth and maturity phases than in the birth phase. On the other hand, power is still quite centralized and operations are fairly simple. So hunch and intuition continue to play an important role.

There is also more attention paid to solving immediate problems and less emphasis given to formulating conscious, explicit strategies. A short-term tactical rather than a long-term strategic orientation prevails.”¹

¹ Source: Miller and Friessen (1984)

Diagnosis

ANAC wants to move from opinion-based decision making to evidence-based decision making. For evidence-based decision making it is vital to have solid market intelligence available with the right people. In November 2006 the SMT drew up a Global System Map in which the basic processes within **ANAC** are schematically depicted using a SIPOC¹ format. This system map needs to be put into action to support and evaluate the business.

What is interesting to see is that the processes and actions for being *market orientated* should be put into place according to the policy makers.

The Listening & Feedback box comprises the market intelligence should be generated. Most of the actions mentioned such as, for example, 'analyze customers' or 'understand competitive environment', are not actively done yet. The Listening & Feedback activities should provide the input for the Leadership & Alignment, through which adequate decisions can be made on company strategy. Market intelligence is, however, not provided on a continuous basis, but in a rather ad hoc way. For example, "Next meeting each team member presents everything he knows about Mankiewicz".

In theory, members of the management teams should already be provided with clear-cut market intelligence before coming together for strategic meetings. In practice, however, this intelligence is not delivered. Management Team members have indicated that this leads to unconstructive discussions since these discussions are largely based on gut feeling. The statements on hunch, intuition, and strategy formulation hold therefore very much true for **ANAC**. Boldly stated, **ANAC sells what it can sell**, without first thoroughly analyzing where the best market opportunities lie. Since **ANAC** has been very successful in the way it does business the danger lies in becoming complacent ("We have always been successful like this") and less adaptive to market forces. A short-term tactical rather than a long-term strategic orientation, indeed, prevails.

Market Orientation

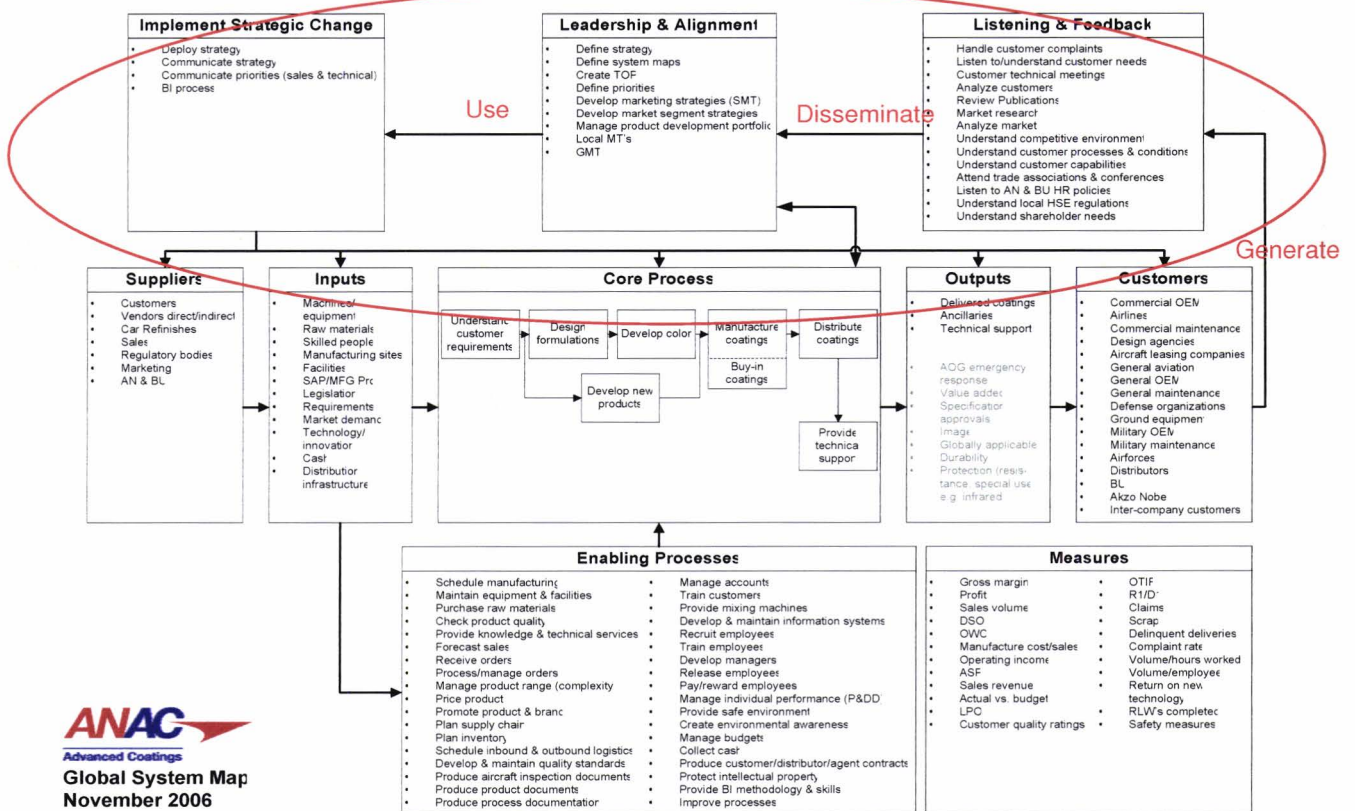


Figure 6.5 ANAC System Map

¹ SIPOC: Supplier, Inputs, Core Process, Outputs and Customers

▪ Organization Culture

An issue that often recurred in the interviews was **ANAC's** organization culture. Interviewees indicated that a major underlying reason why there is no well-defined structure and process in place yet for the generation, dissemination and utilization of market intelligence can be found in **ANAC's** history and corporate culture.

Culture can be defined as "the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization. Organizational values are beliefs and ideas about what kinds of goals members of an organization should pursue and ideas about the appropriate kinds or standards of behavior organizational members should use to achieve these goals. From organizational values develop organizational norms, guidelines or expectations that prescribe appropriate kinds of behavior by employees in particular situations and control the behavior of organizational members towards one another."¹

Employees have indicated that **ANAC** has a highly sales-driven culture ever since its foundation in 1930. This sales-driven culture has taken them to the place where they are now; a highly valued supplier of aerospace coatings with great financial results.

ANAC's culture can be characterized by a high drive to achieve sales targets, a more operational and short/medium-term focus and making decisions for a significant part also on gut feeling (opinion based). Its mindset up to now is that all business is good, that all sales opportunities are good, and that all revenue is good. This clashes directly with the emphasis on attractive opportunities in a market-relating capability rather than dividing resources across high and low priorities. Its mindset is, however, slowly beginning to change to a more market oriented one through Business Improvement Projects

Other cultural attributes that could hinder creating a market orientation through organizational and cultural change are amongst others²: an internal focus; a reliance on historically successful approaches to face new problems/opportunities; low levels of trust between groups within the organization (*"critical questions are being seen as a personal attack"*); employees identifying more with their function, job class, location than with the overall organization; a lack of common understanding of what the firm is trying to accomplish and how. Interviews have indicated that these attributes are to some extent also experienced within the **ANAC** organization. How to create a cultural shift to a market oriented culture will be handled in **chapter 7.1**.

In brief:

- **A short-term tactical rather than long-term strategic orientation prevails**
- **Management team meetings based on gut feeling lead to unconstructive discussions**
- **Highly sales-driven culture**
- **Reliance on historically successful approaches to face new problems/opportunities**
- **Lack of common understanding of what ANAC is trying to accomplish and how**
- **ANAC is, however, slowly beginning to shift to a more market-driven organization**

Summary: 'Where is ANAC now'

ANAC is the market leader in aerospace coatings; a position shared with their main competitor PPG. In the last few decades ANAC has grown so fast that it currently does not have an adequate structure and processes in place for a company of this size. This can particularly be seen in how ANAC copes with the generation, dissemination and use of market intelligence. I found that ANAC's resources are insufficient to systematically handle this. Sales and Product management have evolved into the role of market intelligence provider, but their marketing tasks and responsibilities have never been explicitly formulated. ANAC's culture can be characterized as highly sales-driven, in which a short-term tactical rather than a long-term strategic orientation prevails. ANAC is, however, slowly beginning to shift to a more market-driven organization.

¹ Source: Hill and Jones (2001)

² Source: Gebhardt et al (2006)

6.2 Desired Situation: In which direction does ANAC need to go?

1. Strategy: Revival Phase

"The revival phase is in many ways the most exciting of the five. Remarkable changes begin to take place in the product-market strategies being followed. For example, there are more major and minor product-line and service innovations than in any other period. Also, new markets are entered for the first time as firms become more diversified. This is sometimes accomplished through the acquisition of firms in different industries.

Market segmentation further defines discrete parts of the environment and the firm begins to differentiate its product lines accordingly. Essentially, firms experience dramatic diversification in their products and markets. Their growth does not simply result in an increase in size but an expansion of product-market scope. There is a movement from one market to many, reversing the stagnation of the maturity phase."¹

Diagnosis

ANAC already operates with diverse product lines in different markets and, until now, **ANAC** has, however, not categorized the market place into *global* focus markets. The 6 mentioned focus markets have only recently been officially introduced in the EMEA region. The other 2 regions are slowly beginning to realize the benefits of these product-market strategies, although it will take time and effort before this will actually be implemented effectively throughout the whole organization.

ANAC has vented its ambition to grow faster than the market. **ANAC** therefore also needs to seek profitable opportunities outside its traditional Civil OEM and Maintenance markets. This, however, does not mean that these traditional markets should be not be capitalized upon further. On the contrary, as the validation research for the maintenance market has shown there are still many opportunities to capture. For example, from the current top 30 airlines worldwide, **ANAC** is the preferred supplier of XXX. Whether and how other areas such as, for example, the defense industry can be further developed needs to be thoroughly analyzed.

In brief:

- **The six focus markets of the EMEA region need to be implemented on a global basis**
- **Ambition to grow faster than the market**
- **ANAC needs to seek profitable opportunities outside of its traditional markets**
- **But ANAC also still has attractive opportunities to seize in traditional markets**

2. Situation: Revival Phase

"Firms are the largest considered so far. They are also large relative to competitors. In all of these respects the revival phase corresponds very closely to the maturity phase, the exception being the larger absolute sizes of the reviving firms. But environments are far more heterogeneous than in any other phase, clearly as a result of the strategy of diversification.

To increase sales, firms often enter turbulent new markets where the rate of product-market innovation is high and new competitors are entering the field. As a result, environmental dynamism and hostility are somewhat higher than in any of the preceding phases, though this result is not statistically significant. Indeed, the situation of the revival phase is the most challenging of all. It, therefore, requires the most sophisticated structure."¹

Diagnosis

ANAC has the ambition to continue to be the market leader in the coatings market. Even more so, it has set the aim to grow faster than the market; this will mean that it has to steal market share away from its competitors. This will require a market-oriented culture and a more sophisticated structure and decision making style, which can be seen in the next two paragraphs.

¹ Source: Miller and Friessen (1984)

3. Structure: Revival Phase

“Well-known studies show that structure tends to follow strategy. This is what seems to happen in the revival phase. Divisional structures are adopted to cope with the increased market heterogeneity brought on by the strategy of diversification. No longer can one top executive know enough about his markets. Structures must become less monolithic by having several divisional heads responsible for decision making and performance in different markets. These men oversee their own marketing, production and R&D departments.

A group of head office executives use highly sophisticated control systems to monitor the performance of their divisions. Information is provided to top management about many phases of divisional operations. This allows them to guide corporate strategy by delineating the overall product/market approaches of the divisions, by selecting divisional executives and approving major capital expenditures, and by deciding upon the portfolio of businesses the firm should be in. While strategy-making power may be highly centralized, authority over operating decisions resides entirely with the divisions.

The complexity of markets, as well as their dynamic and competitive nature, makes it imperative that the firm’s information processing apparatus encompass more than formal controls. There is, for example, a need for scanning to discover the key threats and opportunities in the environment.

It is also necessary to ensure effective internal communications across departments and divisions and to coordinate the diverse activities taking place. Indeed the use of scanning and communication devices such as coordinative committees, task forces, and cross-functional standing committees are greatest in the revival phase. These help overcome the high levels of organizational differentiation triggered by the diversity of markets.

Many skilled technocrats are recruited in the revival phase. They are required for R&D, engineering, planning and performance analysis activities, and can help to generate a level of product innovation consistent with the dynamic and competitive markets.”¹

Diagnosis

Companies in the revival phase seem to adopt structures that can effectively respond to the increased market heterogeneity. Since **ANAC** also has to form strategies for its diverse focus markets it is interesting to see whether and how it should act upon this by restructuring its organization.

It is true that no longer one **ANAC** top manager can know enough about all the focus markets and act accordingly, since each of them has its own characteristics. For example, the unpredictable land defense industry needs to be approached in a totally different way than the highly formalized maintenance market. Also the product lines themselves vary considerably across the focus markets. It is an interesting question whether the grouping of sales managers by area is ideal considering the fact that these focus markets each have their own specialized characteristics and product specifications.

The complexities of these dynamic markets make it necessary to continuously scan and analyze the market and its environment on key threats and opportunities. As the current situation revealed, **ANAC** does not have a department or function in the organization that is actively responsible for this. It is highly likely that new skilled people have to be recruited to fill these positions.

Various ways exist to improve **ANAC’s** structure for becoming more market orientated. This can be done by giving marketing a serious position within the organization and by assigning it global responsibility. See **figure 6.6** for a concept organization chart with a global marketing department. This will be further elaborated upon in the next chapter: Market Orientation Measures. Changing **ANAC’s** organizational structure to support the generation, dissemination and use of market knowledge is a necessary condition to reach the objective, but is not sufficient in itself. In fact, before new structures can be adequately implemented, change is highly necessary in terms of the organizational culture and info support systems.

¹ Source: Miller and Friessen (1984)

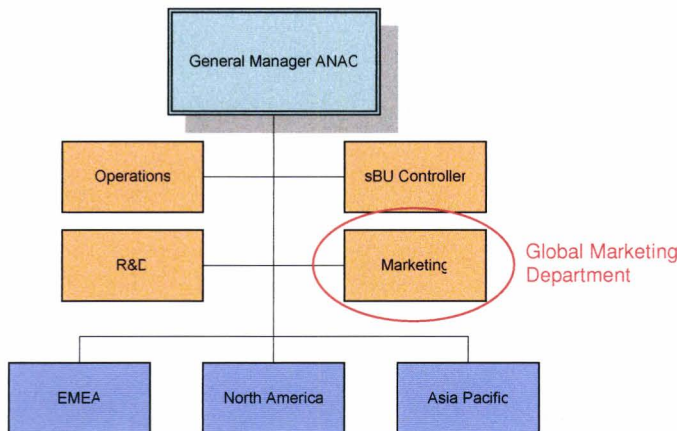


Figure 6.6 Concept Organization Chart Global Structure

The role and relevance of marketing

The role and relevance model of marketing in small and medium sized enterprises¹ (SMEs) offers a straightforward way of visualizing the marketing situation within **ANAC** (with less than 500 employees categorized as a medium sized company). The simplicity of the model allows for a clearer understanding of what is often an unclear situation. **Chapter 7.2.2.** covers the concept of marketing in more detail.

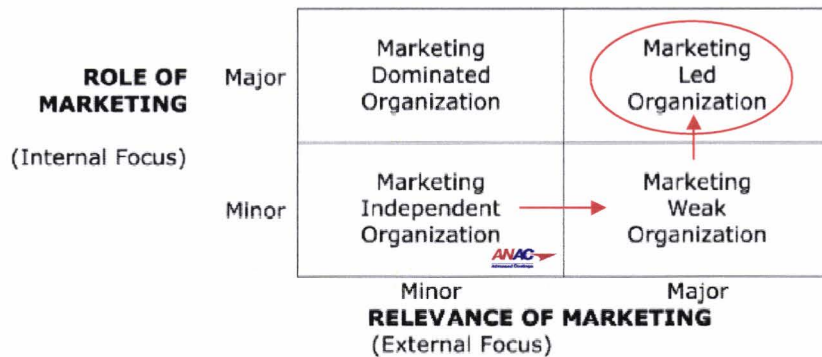


Figure 5.8 The role and relevance of marketing

The relevance of marketing is defined by the need for marketing activities to sustain and grow the organization in a competitive business environment. The role of marketing is defined by the actual marketing efforts used by the organization. **ANAC** currently assumes that the relevance of marketing in its aerospace coatings industry is minor. As a result it puts little effort in marketing activities (minor role of marketing). It positioned itself as a Marketing Independent organization. Due to **ANAC's** ambitious goals and the competitive environment the relevance of marketing is however major. **ANAC** should, therefore, become a Marketing Led organization, which is in line with the desired market orientation.

The first step in becoming a Marketing Led organization is that **ANAC** acknowledges the major relevance of marketing in their situation. The most convenient way for SMEs to adopt marketing practices is, therefore, to follow the route to a Marketing Led organization via the position of a Marketing Weak organization. Research¹ also established that often enlightened employees are frustrated by their company's lack of enthusiasm for marketing and the company's confusion of marketing with advertising and selling.

¹ Source: Simpson et al. (2006)

The basis requirements for a Marketing Led organization are: a marketing database; an active business plan; marketing representation at board level; and a marketing department.¹ **Chapter 7.2** will go into detail on **ANAC's** concept marketing department.

In brief:

- **ANAC needs to continuously scan and analyze the market on key threats and opportunities**
- **ANAC needs to have a department or function that is responsible for this**
- **Due to its ambitious goals and competitive environment relevance of marketing is major**
- **To become a marketing led organization ANAC needs: a marketing database, an active business plan, marketing representation at board level and a marketing department**
- **New marketing-skilled people need to be recruited**

4. Decision Making Style: Revival Phase

"An innovative, proactive, risk embracing style predominates. Firms pursue rapid growth through innovation, acquisition, and diversification and this involves a good deal of risk taking. It also encourages leadership in innovation rather than imitation of the strategies of competitors. But boldness is mitigated and informed by an analytical, reflective and participative approach to decision making. It is common for task forces and project teams to be formed to analyze major capital expenditures, innovations or acquisitions. Groups of experts come together to analyze problems and to generate and evaluate different solution alternatives in a systematic and scientific way.

Use is made of PERT, capital budgeting and action planning techniques. Close attention is paid to projected returns and the evaluation of potential customer reactions. As a result, decisions become more responsive to market requirements. There is an attempt to consciously formulate a detailed and integrated product/market strategy and to look well into the future in plotting the course of the firm.

A head office department of staff planning specialists and financial analysts guides the evolution of the strategy, ensuring that the firm develops in an orderly and systematic way. As we hypothesized, the most challenging situation is met by the most sophisticated structural and decision making orientations."²

Diagnosis

The statements described above give a guideline through which **ANAC** can develop itself into the next phase. The message is to become innovative and proactive, supported by an analytical, reflective and participative approach to decision making. **ANAC** needs to move from opinion-based to evidence-based decision making.

Changing corporate culture is complex and takes time. *"Why should we change the way we are doing things: this way has always been successful for us"* is commonly heard within organizations. Corporate culture needs to be taken into account when becoming more market oriented. During the orientation phase it became clear, however, that most **ANAC** employees are enthusiastic in changing the way they are working now to a more structured market-driven approach. This will be further elaborated on in the next chapter Market Orientation Measures.

¹ Source: Simpson et al. (2006)

² Source: Miller and Friessen (1984)

Capturing the M & PC Market

As mentioned in **chapter 3.1** (Reason for the project) several Business Improvement projects are currently running to help shift the culture and create growth of the Marine and Protective BU. One of these projects run by a Business Improvement team is the 'Capturing the Market' project for the worldwide Marine & Protective Coatings market.

The team sponsor¹ of this project is Grant Russell (Worldwide Marine & Protective Market Manager), while the current champion² is Andrew Hopkinson (Business Manager Cargo Tank Coatings). The aim of their project is to deliver a process that will channel relevant, accurate and reliable market intelligence to those people making the decisions on future company strategy and the development of new products and services for the worldwide Marine & Protective market (until now, however, without the **ANAC** sBU).

Phase 1 of this project started at the beginning of 2006. The purpose of the initial phase of this project was to gain an understanding of how they currently gather information on the expected, wanted and latent needs of customers participating in their focus markets, in order to generate Project Justification Documents to support the Technology & Innovation (T&I) process.

The design, testing and (limited) implementation of the process is executed in Phase 2 which ended in October 2007. After this period roll-out plans had to be made for full implementation.

The findings from the research at **ANAC** shows great consistency with the results from Phase 1 of the CtM project from M&PC. Just like M&PC, **ANAC** does not have a formalized process for marketing activities. This project is relevant to **ANAC** since the project outcomes can teach them, once they have been implemented successfully throughout the M&PC BU, how to handle market information processes. It is a matter of time before **ANAC** might be forced by the M&PC BU to also implement the Capturing the Market processes. In anticipation of this decision and to make future implementation easier **ANAC** should already take appropriate measures regarding roles and responsibilities and market information processes.

In brief:

- **ANAC needs a more analytical, reflective and participative approach to decision making**
- **From opinion-based to evidence-based decision making**
- **Decision making needs to be based on how actions affect the market**
- **ANAC should learn from the Capture the Market implementation throughout the M&PC BU**

Summary: 'In which direction is ANAC going'

The benchmark with other companies in the revival phase gave a good guideline for the direction in which **ANAC** should move. **ANAC** wants to grow faster than the market. Looking at **ANAC's** ambitious growth plans and the intense competition force, I recommend **ANAC** to work more professional and market oriented. Based on scientific literature, observations, interviews and personal judgment, this asks for a market-oriented culture, an improved organization structure and a systematic process for the generation, dissemination and use of market information. The next chapter will provide complementary measures on how this can be done and how it needs to be implemented.

¹ Sponsor: Accountable for success of the project

² Champion: Responsible for the delivery of the project, leads and motivates the project team

Chapter 7. Market Orientation Measures

This chapter will handle the complementary measures following the analysis phase to support **ANAC** in becoming more market orientated. Since there is no single solution for improving **ANAC's** current organization, measures will be given from different perspectives. These measures each handle a different aspect of the problem with its own benefits and concerns, but all aim to aid **ANAC** becoming market orientated and reach its ambitious long-term goals. The measures will be evaluated in light of the design criteria.

Market orientation literature research handed various suggestions to improve **ANAC's** ability to generate, disseminate and use market intelligence. One of the strands that will be used is market orientation focused on organizational and cultural change processes. Market orientation can also be handled by focusing on the organization structure. Another element is handling market orientation by focusing on market information systems. These strands will be used to solve the defined elements of the problem at the beginning of this research.

Figure 7.1 schematically depicts the build-up of this chapter. **ANAC** will not be able to structurally manage market information if its current organizational culture remains as it is. **Chapter 7.1** describes the way **ANAC** can create a market-orientated culture through organizational and cultural change. Changing the organization culture is the first step in becoming market oriented; it forms the basis to bring about changes in the organization structure and information processes. These changes need to be embedded in the new set of shared values, norms and understanding. **Chapter 7.2** handles the concept design for strengthening **ANAC's** organization structure. **Chapter 7.3** describes the information processes that support the generation, dissemination and utilization of market information.

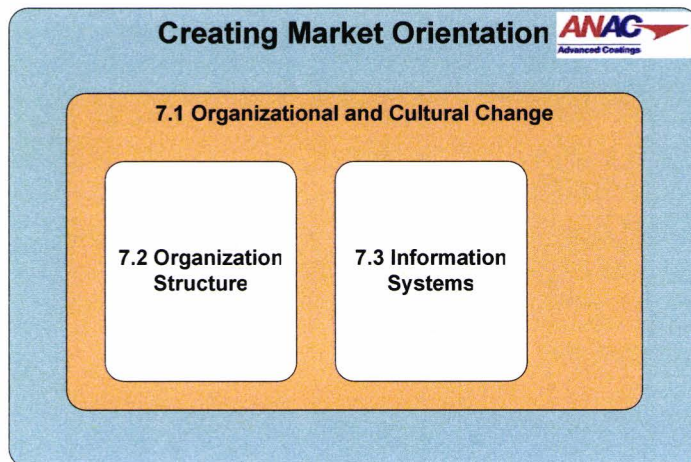


Figure 7.1 Chapter Build-up: Creating Market Orientation

Design Criteria

In the previous chapter an analysis was given of **ANAC** and its problems. Before providing **ANAC** recommendations on how **ANAC** can improve its organization to generate, disseminate and use market intelligence more systematically, firstly the design specifications needed to be formulated. These are described below.

- **Feasibility**
The recommendations should not only remain a theory on paper but will need to be implementable as well. Designing sophisticated theories and models that cannot be implemented in the company have no value whatsoever. The feasibility deals with the question if the recommendation is *technically* implementable.
- **Acceptability**
In order for the recommendations to succeed support has to be created from the people who have the authority and influence to implement them and from the people who are affected by these recommendations. This support and acceptance can best be achieved by involving the people from the very beginning. People tend to resist change unless they have adequate opportunity to adjust to it¹. Creating acceptance of stakeholders is a vital part of the project. Acceptability deals with the question whether the recommendation is implementable taking the *human factor* and resistance to change into account.
- **Costs and Benefits**
The recommendations should take the potential costs and benefits into account that will come into effect when a design will be implemented. This will be done qualitatively and where possible also quantitatively.
- **Validation in focus market**
The concept design will be partly tested in one focus market. Through this testing phase the design can be partly validated and, where necessary, redesigned.
- **Deliverables which fall outside of the Project**
 - Full implementation of Market Orientation
 - Development of market strategies
 - Development of marketing materials
 - Training of sales forces
 - Sales opportunities / Project data (what, where, when)
 - Design of IT-infrastructure
 - Gathering market information other than for validation purposes
 - ...

¹ Source: Moran and Brightman (2001)

7.1 Organizational and Cultural Change

Creating a market orientation requires dramatic changes to an organization's culture and the creation of organizationally-shared understandings. Research on organizational change suggests that though formal actions such as changing organizational structures (in this case strengthening the marketing function) and incentives are an important road to change, the change process is much more complex.

As mentioned in **chapter 5**, market orientation theory, research¹ shows that the process of creating a market orientation occurs over four distinct stages: (1) initiation, (2) reconstitution, (3) institutionalization, and (4) maintenance. Carrying out activities pertaining to these stages will help **ANAC** in becoming more market orientated.

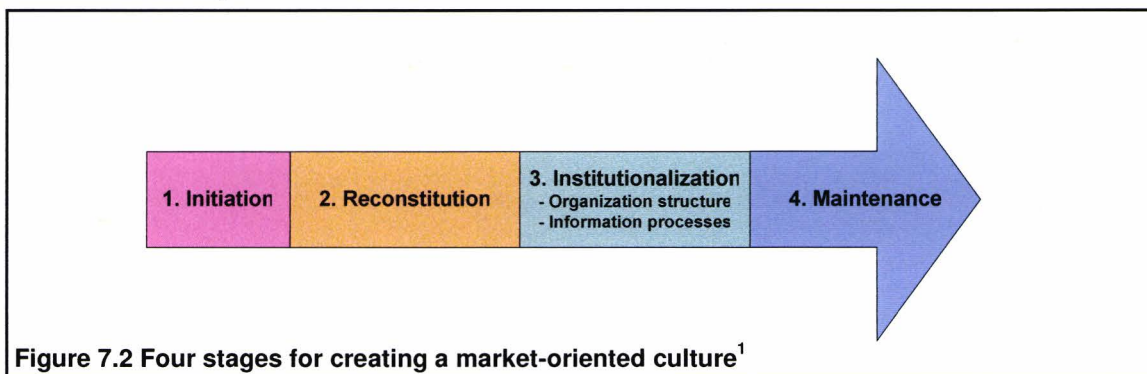


Figure 7.2 Four stages for creating a market-oriented culture¹

🚧 Stage 1: Initiation

The process of change usually starts with members of the organization recognizing a threat to the organization. Threats take many forms, but are typically not widely recognized by the company. The same goes for **ANAC's** organization. An external threat such as bad financial results can be an important drive to change. In **ANAC's** case, however, financial results have been excellent and targets are met successfully.

This makes it difficult to convince the global top management of **ANAC** that if things are not going to change soon, meeting their long term goals will be difficult and aggressive competition will start taking over market share. "We're doing well, why should we change anything" seems to be the attitude of certain influential global management team members. They do not agree with the need for change. This dangerous in today's competitive environment in which customers coatings needs are highly specific and demanding.

Therefore a Business Improvement (**BI**) team needs to be formed. This team should consist of members who see the threats facing **ANAC** and are willing to and capable of guiding change. Apart from having credibility, influence within the company, and know-how the **BI team** members need to be convinced of the following criteria:

1. **A genuine respect for the ability of every organization member to contribute to the organization's future.**
2. **A belief that market needs should drive organizational change.**
3. **A belief that decision making should be based on evidence rather than opinions.**
4. **Willingness to invest in time and resources.**

To create a sense of urgency for the need to change, the **BI team** can picture a real or manufactured crisis that exposes flaws in **ANAC's** current approach to the market and its customers. An example of this can be investigating which are the Top airlines worldwide calculated by fleet size and surface. This will reveal that **ANAC** is not well-represented as a supplier to the largest airlines. It will tackle complacency by showing managers and employees that **ANAC** actually is not doing as good as it thinks it is doing and will serve as a wakeup call. Questions such as "How is this possible?", "How can we change that?" are then bound to arise.

¹ Source: Gebhardt et al. (2006)

The **BI team** needs to come up with a concrete plan for change. Plans need to focus on organization culture, structure and process changes. Recommendations and concept designs on how this can be taken on are given in this chapter. Besides a roadmap for creating cultural change, two other change initiatives are handled in this chapter: organization structure and information processes.

In summary, creating a market-oriented culture requires shared values and agreement on a plan among the people expected to create change, in this case ANAC's Business Improvement team.

🚧 Stage 2: Reconstitution

Reconstitution is the organization-wide implementation of the plan for change. **ANAC's BI team** should present its plan to the entire organization. This should be done in a public and open way, in which all organizational members can attend the event simultaneously. The plan for change and the values, norms, and behavior the **BI team** wants to bring about need to be clearly communicated.

The analysis made clear that **ANAC** has a highly sales-driven culture, in which short/medium term decision making prevails and in which decisions are rather based on opinions than on evidence. Therefore, **ANAC's BI team** need to create a new set of organizational values that in combination with subsequent activities, will create a more market-oriented culture.

Values and Norms

The market as the *raison d'être* needs to be the central cultural value providing a basis for the other five values of trust, openness, promise keeping, respect, and collaboration, all of which are required for an effective market orientation. In practice the *raison d'être* should come down to that **ANAC must consider how every decision and action affects the market**. The combination of the six cultural values create an organizational environment that supports organization-wide collaboration, builds shared understanding of problems and ideas, and leads to more effective finding and implementation of solutions through tighter collaboration. Apart from explicitly formulating behavioral norms in line with the desired values and norms, the use of adequate rewards and recognition help in creating cultural change.¹

Tabel 6.1 shows the values, assumptions and norms of market-oriented firms and provides a good benchmark on which **ANAC** can base its own set of values and norms. **ANAC** should ask itself: What are the five most important values we would like to see represented in our organizational culture? Are these values compatible with our current organizational culture? Do they exist now? If not, why not? If they are so important, why are we not attaining these values?

Cultural change follows behavioral change. Change occurs by altering behavior patterns and helping people understand how new behavior relates to performance improvement. Eventually these changes will be absorbed into the underlying norms, beliefs and mind-sets. **ANAC's BI team** must ensure that the formulation of new cultural values and norms are accompanied by follow-up actions (e.g. meetings, convention speeches, company newsletters, formal communications to stakeholders) and must act as role-models for lower level employees.

Overall, the cultural values are the basis for market-oriented behavior, namely the generation of, dissemination of, and responsiveness to market intelligence.²

¹Source: Gebhardt et al. (2006)

²Source: Kohli and Jaworski (1990)

Value	Assumption	Behavioral Norms
Market as the raison d'être	We come together as an organization to serve the market and make a living.	Every decision and action must consider how it affects the market.
Collaboration	Working together, we can achieve more, faster and better, than apart.	Work is done collaboratively by teams. Teams are jointly responsible for outcomes.
Respect/empathy/perspective taking	People are basically good and have reasons for their actions.	Consider the perspectives, needs, training, expertise, and experiences of others when reacting to or interpreting their actions.
Keep promises	To succeed, everyone must do his or her part.	Each employee is responsible for following through on commitments to others.
Openness	Honestly sharing information, assumptions, and motives allows others to understand and effectively collaborate with us.	Proactively and honestly share information, assumptions, and motives with others.
Trust	Everyone is committed to the same goal. Therefore, we can have positive expectations about their intentions and behaviors.	Trust that your fellow employees are telling the truth and will follow through on commitments.

Table 7.1 Values, and Norms of Market-Orientated Firms¹

Shared understanding

Firms create their shared understanding by sending **cross-functional teams** into the market to meet with customers, channels, and influencers. **ANAC** already does this to some extent as product managers or people from R&D visit customers together with a sales manager. But to grow the shared understanding, these occasions should be more frequent and structured. The responsibility for the coordination of these visits should be assigned to one function. This role can, for instance, be assigned to the market knowledge manager. The market knowledge manager will be further described in **chapter 7.2**.

As a product manager of **ANAC** commented: *“usually only our sales managers visit customers, but I went with them a few times and this was really interesting. I have a good sense of the market, but by actually going together with a sales manager and exchanging information and thoughts I get valuable insights I did not have before. Sometimes things work differently than I thought they worked and I understand better which things are important and moreover why. This also provides valuable information for managing our products.”*

Another proof of the usefulness of a cross-functional approach is the joint customer visits of Sales, R&D and Technical marketing/ commercial director to Airbus endline, through which **ANAC's** (technical) position at Airbus is monitored.

It should, however, not only stay with jointly going to customers, but also on how this information will be shared from multiple perspectives and be used in a constructive way. The information processes handled in **chapter 7.3** further elaborate on this.

The shared values and norms and cross-functional sharing of information will make **ANAC's** organization agree on what the market is, how it develops, what its needs are, and how to collaborate on meeting those needs. Furthermore, as a result of the shared meaning, purpose and market experience, employees will engage in more generous attributions toward colleagues, facilitating increases in cultural values of trust, openness, respect, promise keeping and collaboration.¹

The collaborative development of strategy will leverage **ANAC's** collective knowledge and capabilities, leading to more creative and realistic strategies, which can be implemented. The organization-wide understanding of strategic goals and their relation to the market provides the context for why specific tasks are important, increasing the likelihood of success. For example, many members within **ANAC's** organization questioned whether the strategy to enter the land defense market was a justified one. To them, whether the strategy proves to be successful or not, this market seemed to be entered without shared understanding, collaboration and thorough preliminary research and analysis.

¹Source: Gebhardt et al. (2006)

To create an organizational culture based on these values, special attention must be given to perceived fairness in decision-making processes. Fairness can be brought about by¹:

1. Individuals (and departments) must be involved in the decision-making processes pertinent to their work, and must have the opportunity to express their disagreement with other's opinions and positions.
2. Explanations must be given of reasons behind decisions and why suggested ideas or opinions were not utilized.
3. Expectations must be clearly defined (before, during, and after a decision is made) based on present or future decisional rules, when applicable.

In summary, the reconstitution stage will create the culture, understanding, and processes that lead to the organization-wide generation, dissemination, and use of market intelligence.

Stage 3: Institutionalization

After actions are taken to initiate the necessary organizational culture change, resulting in market oriented behavior and shared understandings between all members of the organization, it is time to formally strengthen the organization structure, information processes and systems (such as Customer Relationship Management technology).

To further encourage a market-oriented culture **ANAC** should align its culture with its incentive structure. Matching individual expectations and performance directly with the company's mission, values, and business processes can bring this about. By doing so employees no longer have to make trade-offs between what is good for them personally (short term) and what is good for the organization as a whole (long term). For example, selling paint to a particular company brings revenue, and can make a sales manager reach its target, but he also needs to take into account how this affects the other functional departments and the costs incurred for the organization.

At the moment **ANAC** already works with result-dependent assessments (so called RAB's). These indicators and targets are set at the beginning of the year. The individual influence on some of these indicators is however very limited or even nil. It is recommended to also align more personal fitted rewards with the organization's goals.

In summary, the institutionalization of a market orientation requires formalization of organization structures, processes, systems, alignment of rewards, and cultural learning through training. The organization structure is handled in detail in chapter 7.2 and information systems are handled in chapter 7.3.

Stage 4: Maintenance

After initial success in becoming more market oriented, **ANAC's** top management needs to sustain the change process and drive the organization to higher levels of market orientation. They need to continuously disseminate best practices, measure and assess progress (and assess the methods used for measuring), and focus attention on the process.

Most successful change initiatives begin with an early, visible win that the company can celebrate and use as an example. In **ANAC's** case this can for instance be the identification and capturing of a previously untargeted customer.

A sustained effort requires ongoing monitoring of performance against objectives for improvement in important market metrics. Whatever measure is used, it should be closely linked to financial performance, easily understood, and reliably measured so people have confidence in the results.

In addition to disseminating best practices and using measures, **ANAC** should use continuous benchmarking against competition, frequent input from customers, and constant questioning of all processes to reinforce the effort to become market oriented.

¹Source: Troilo (2006)

Summary

Making ANAC more market orientated is essentially a process of cultural transformation. ANAC's BI team can create cultural change by educating all organizational members on new market-orientated values. Furthermore, cultural change requires direct contact with the market, providing ANAC's employees with shared understanding and purpose. The cross-functional and organization-wide collaboration brings about a culture in which all employees show enthusiasm to serve the market and, as such, provide benefits for the company as a whole.

ANAC should undertake the following measures to become market oriented:

1. **Top Management Focus** is required to begin and guide the process of becoming more market oriented. A team of **ANAC's** influential stakeholders needs to be formed to officially challenge the current organization and come up with new market oriented values and norms.
2. **Interdepartmental Cooperation** is essential. **ANAC** needs to create more shared understanding and meaning by working cross-functionally and by frequently sending cross-functional teams into the market to meet customers, distributors and influencers.
3. **Reward Systems** need to align employees' incentives with those of **ANAC's** organizational goals as a whole. In doing so, employees do not have to make a trade-off between their personal interests and those of the company.
4. **Monitoring Performance** against objectives for improvement in important market metrics. For example customer satisfaction and market share metrics. Effectively, this can also be coupled to the reward system.
5. **Review Organization Structure.** Changing the physical structure of the company to align it with the desired organizational culture is necessary. **ANAC** needs to assign roles and responsibilities that will drive a market orientation. The organization structure will be handled in detail in **chapter 7.2**.
6. **Information System and Processes.** Having an adequate information system and information processes in place provides support for the generation, dissemination and use of market intelligence. This will be covered in **chapter 7.3**.

Diagnosis of Organizational and Cultural Change

The suggested measures for organizational and cultural change are evaluated in light of the criteria feasibility, acceptability and costs and benefits.

Feasibility

ANAC can only bring about the necessary organizational and cultural change when the following *potential barriers to change*¹ will be overcome:

- **Absence of leadership**
If **ANAC's** BI Champion lacks know-how, skills, credibility and influence or cannot bring the rest of the **BI team** to consensus, the whole effort is likely to be futile. Also the **BI team** as a whole needs to be capable of steering the entire organization. Careful selection of a BI Champion and team members is, therefore, required. Business Improvement training will be necessary to increase the team members' abilities.
- **Management turmoil**
Many initiatives have stalled or failed during turmoil in managerial ranks. The champion is gone, and the new team has not accepted the initiatives or wants to do something different.¹ An important aspect when selecting the **BI team** to ensure consistency, should therefore be, the long term availability of its team members.

¹ Source: Day (1999)

- **Poor implementation**

Implementation problems range from lack of resources or time, to employees not clearly understanding the benefits and goals. Especially the lack of time will be a difficult barrier to overcome. Top managers and potential **BI members** already have a full-time job managing their current tasks. It is also hard to sustain enthusiasm without early success or success that is not communicated and celebrated properly. **ANAC** therefore needs to make adequate resources available if they want the plan to succeed and actively communicate the benefits, goals and success. Success stories will stimulate people to continue or to start putting in more effort.

Overall, cultural change is *technically* feasible at **ANAC** if an adequate Business Improvement team is formed, resources are made available and the change program is properly communicated.

- ✚ **Acceptability**

At least equally important or even more important for a successful cultural change within **ANAC** is the acceptability when it comes to the human factor. Two *potential barriers to change*¹ need to be taken into account:

- **Stifling cultures**

Cultures in which managers and employees are suspicious of new ideas can quickly derail a change process. Subtle resistance can arise when managers or employees think they are doing well and regard the new program as an implicit criticism of their efforts. The **ANAC BI team** should make clear that the change plan is certainly not aimed at finger pointing at people, but to benefit the organization and its employees as a whole.

- **Lack of urgency**

If **ANAC's** managers and employees do not feel change is urgently needed, other more pressing concerns (such as immediate sales results) will push it aside. Some people may feel that they are too busy and cannot possibly spare the time. Others may protest that they are already doing it or that it is a waste of money. If the company is already successful, and **ANAC** is, people may feel that they know the customers and competitors well enough. To create a sense of urgency the **BI team** can picture a real or manufactured crisis that exposes flaws in **ANAC's** current approach to the market and its customers (e.g. a lack of customers in the top 30 airlines worldwide).

- **Initiative burnout**

Weariness settles on organizations that have been forced to change more or less continuously as strategic priorities change. At the moment **ANAC** is running many Business Improvements at the same time. The danger lies in managers and employees getting tired and overloaded with all kinds of change initiatives. **ANAC** must carefully select which BI programs it wants to run parallel in order to improve its chance of success.

- ✚ **Costs and Benefits**

Cultural change does not happen overnight. In fact changing **ANAC's** organizational culture is a highly complex change process since its values and norms are deeply rooted within the organization and often intangible. Costs for creating a cultural change are mostly concerned with making people available for leading and coordinating the change process.

An adequate **BI Champion and team members** have to be assigned. Depending on their assigned tasks and responsibilities, they need to dedicate a certain percentage of their time or even their full-time to the change program. Consequently, their current tasks need to be (partly) taken over by other employees or new employees have to be recruited to fill these positions. This will naturally increase the salary expenses of **ANAC**.

The program to transform **ANAC** into a market-oriented organization must begin quickly but be sustained over many years. The cultural change will take time: at least one year or, more likely, between two and four years. **ANAC's** commitment and patience will be rewarded, for example, with higher revenues and market share. Results like this will justify the effort and sustain the change program.

To attain sustainable competitive advantage, a substantial market orientation must be the foundation of **ANAC's** strategies. Research showed that "an external focus stimulates new ideas and responsiveness to markets"¹ and that **the implementation of a market orientation leads to improved financial and marketing performance**, such as return on sales, profitability, sales and market share.² Furthermore, adopting a market orientation can be an economical decision for **ANAC** in terms of reducing costs associated with losing both employees and customers.

When **ANAC** becomes market oriented it will have the ability to sense trends and events in the coatings market ahead of competitors. It can anticipate better the responses to actions designed to maintain or attract customers, improve distribution relationships, or oppose competition. It can act upon market information in a timely, coherent manner since the assumptions about the market are broadly shared.

From the sales force's point of view, **ANAC's** management can be very influential in shaping the orientation of its sales force to be market driven, through its recruitment, training, evaluation, and reward systems. Studies show that the firm will achieve greater levels of customer-oriented selling and more positive job attitudes by salespeople.³

The costs and benefits of the market orientation institutionalization regarding organization structure and information systems will be covered in more detail in **chapters 7.2 and 7.3**.

Summary

ANAC needs to improve its organizational culture in order to become market oriented. As a result ANAC will be able to better anticipate on market developments and accomplish its long term business goals. Changing the organizational culture requires time, commitment, patience, planning and proper execution - but it can be done.

¹ Source: Day (1994); Hult (1998); Kohli and Jaworski (1993); Sinkula, et al (1997); Narver and Slater (1994)

² Source: Green Jr et al (2005)

³ Source: Siguaw et al. (1994)

7.2 Organizational Structure

As made clear earlier the **ANAC** organization has no clear marketing function. At the moment, marketing activities, are to some extent, carried out by other functional departments and functions. This is done in an unstructured manner in which roles and responsibilities regarding market intelligence have never been made explicit. As a result, **ANAC** cannot effectively anticipate market developments and monitor its customers and competitors.

Various measures can be taken to institutionalize the market orientation within **ANAC's** organization (see step 3 institutionalization in **chapter 7.1**). One of them is to align the organization structure with the desired market-oriented culture.

This paragraph will focus on the organization structure, in particular on the organization of the marketing function of the company. On the one hand **ANAC** may choose to maintain the current organization structure but strengthen it by rearranging certain roles and responsibilities. On the other hand **ANAC** may choose to restructure its organization with the implementation of a Marketing Department. These two extremes are both described in detail in this paragraph.

7.2.1 Maintaining Current Organizational Structure

The previous chapter gave insights into how **ANAC** currently handles the generation, dissemination and utilization of market information. It was made clear that this is not done in an adequate manner. The measures that can be taken and its effects if **ANAC** chooses to maintain its current organization structure are described below.

- **Market Oriented Culture**

Chapter 7.1 provided measures **ANAC** needs to undertake to create a market-oriented culture. These measures can still be taken, but will be far less effective without properly aligning the organization structure. The renewed cultural values and norms form a good basis for a market orientation, but they also have to be put into action. This is difficult with the current organizational structure. For example the behavioral norm that every decision and action must consider how it affects the market cannot be executed adequately when no one has the responsibility and function to actively monitor the market.

- **MIPS**

The Market Intelligence & Product Support Group (MIPS), located at the Sassenheim site provides market intelligence for Akzo Nobel. They can be requested to perform market research and analysis. MIPS has 5 people working on desk research and 5 business analysts. Next to that, they have access to databases, which include various reports, magazines and articles regarding coatings. There is, however, limited information available that specifically covers the aerospace industry.

Some time ago **ANAC** assigned MIPS to perform market research on the general aviation market. The opinions about the quality and usefulness of this data were divided. The major reason why **ANAC** currently does not make use of MIPS lies in the fact that **ANAC** considers MIPS too expensive for the gathering and analysis of market information. Furthermore, they are of the opinion that MIPS does not have expert knowledge about the aerospace industry. It prefers carrying it out internally. MIPS's desk research is rated at 75 Euros per hour while a business analyst is rated at 100 Euros per hour.

As made clear, however, at the moment **ANAC** does not carry out any structured market research or analysis internally. If it chooses to maintain its current organization structure and decides not to strengthen its internal marketing capability, it is highly recommended that it, at least, hires an external party such as MIPS. Without any proper resources to provide market intelligence, **ANAC** will continue to have difficulties to anticipate developments in the market. The more **ANAC** works together with a MIPS business analyst, the better **ANAC** can indicate which specific information it requires and the more aerospace expertise the business analyst will build up. Since MIPS is an external party, the danger arises that they are not seen as a full member of the **ANAC** organization (in the sense of "what do *they* know about *our* business?"). Instead, **ANAC** has to emphasize the main advantage of an

external party: the perceived objectivity. A third party can provide the market intelligence without any hinder of social emotional and political issues that play a role within the organization. MIPS' only concern is to objectively provide the intelligence. It will, however, still be necessary for the business analyst to cooperate and share information with people within the company, especially with those who have direct contact with customers.

▪ Marketing & Sales Training

ANAC's sales force indicated that they have had little or no marketing education. Training should be given on how to categorize and prioritize current and future customers so that the best opportunities are targeted. In fact, **ANAC** recently hired an external consultancy company to provide sales training to the sales force and other relevant functions. One of the key issues is the introduction of the Sales Platform. The Sales Platform is a method of managing a sales resource and measures both activity and the customer base necessary to achieve required results. See also **figure 7.4**.

▪ Information System and Processes

The information system and processes that will support **ANAC** in becoming more market oriented is handled in **chapter 7.3**.

Diagnosis Maintaining Current Organizational Structure

Benefits and Concerns

If **ANAC** decides not to strengthen its internal marketing capabilities, and to hire MIPS, a budget must be made available. At a rate of 100 Euros per hour, salary expenses for a fulltime business analyst will be around €160.000 a year (based on 8 hours per day, and 200 working days), which is, of course, a huge amount. Depending on **ANAC's** information needs, the business analyst can be hired part-time.

Apart from these high salary expenses, the main concern for hiring an external party will be that the marketing function will still not be embedded within the organization. The benefit will be that **ANAC** will be provided with objective market intelligence.

In 2007, STEM Techniek en Marketing¹ performed a MarketingExcellenceScan to gain insights into the status of the marketing function of the Dutch industry and to support industrial organizations with the development of the marketing function. **ANAC** was one of the companies that participated in the benchmark. The participating companies ranged from raw material suppliers to OEM companies and from chemicals to ICT.

A few important findings of the scan relevant to **ANAC's** project are that the Best in Class companies all formulated explicit cultural values, professionally handle the cultural change and have a marketing department, which is placed in a line structure. The fact that the Best in Class companies all have a marketing department supports the usefulness and necessity of forming a marketing department within **ANAC**.

This is further supported by the fact that other Akzo Nobel (s)BUs active within the coatings industry, such as Marine Coatings and Car Refinishes each have a professional marketing department.

Summary

Even though ANAC can take several measures without altering the current organizational structure, these changes will only lead to minor steps in the direction of a market oriented organization. This is due to the fact that the measures are complementary and work far less effectively when an important pillar is not properly aligned, in this case the organization structure. ANAC needs to formalize the marketing function within the organization. The next paragraph provides a concept design on how to strengthen ANAC's organization structure through the establishment of a marketing department.

¹ STEM: Stichting Techniek en Marketing (Foundation Technique and Marketing) is specialized in marketing for technical companies. Its board of management consists of prominent representatives from the trade and industry, such as (old) board members of Akzo Nobel, DSM, Siemens and Stork.

7.2.2 Marketing Department Recommendation

ANAC's organizational structure needs to be aligned with the required market-oriented culture. To be able to adequately anticipate developments in the market, maintaining the current organizational structure will not suffice and important changes are required.

This paragraph handles the establishment of a formalized¹ **marketing department** within the organization. A marketing department will strongly improve **ANAC's** capabilities to generate, disseminate and make use of market intelligence.

What is Marketing?

Before a concept design for **ANAC's** marketing department is provided, definitions on marketing will firstly be given. A few of the many existing definitions on marketing are provided below.

- The American Marketing Association (AMA) states, "Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives."²
- The Chartered Institute of Marketing defines marketing as, "The management process responsible for identifying, anticipating and satisfying customer requirements profitably".³
- Philip Kotler and Kevin Lane Keller define marketing management as "the art and science of choosing target markets and getting, keeping and growing customers through creating, delivering, and communicating superior customer value."⁴
- "Marketing is an organizational function and set of processes for creating, communicating and delivering value to customers and for managing relationships in ways that benefit the organization and its stakeholders."⁵
- "Marketing includes identifying unmet needs; producing products and services to meet those needs; and pricing, distributing, and promoting those products and services to produce a profit."⁶

ANAC's top management need to be convinced that marketing is a management responsibility and should not be solely left to junior members of staff. Marketing requires coordination, planning, implementation of campaigns and competent managers with the appropriate skills to ensure success.⁶

Marketing objectives, goals and targets have to be monitored and met, competitor strategies analyzed, anticipated and exceeded. Through effective use of market research and active customer visits **ANAC** should be able to identify the needs and wants of the customer and deliver them benefits, while at the same time ensuring that the satisfaction of these needs results in a healthy turnover for the organization.⁷

In the end marketing basically comes down to:

- A focus on the satisfaction of customer needs, wants and requirements.
- The philosophy of marketing needs to be owned by everyone from within the organization.
- Future needs have to be identified and anticipated.⁷

¹ Formalization: Formalization of rules define roles, authority relations, communications, norms and sanctions and procedures (Hall, Haas and Johnson, 1967)

² Source: Wilson and Gilligan (1999); Brassington and Pettitt (2003)

³ Source: The Chartered Institute of Marketing

⁴ Source: Kotler and Keller (2006)

⁵ Source: McDaniel et al.(2006)

⁶ Source: <http://www.learnthat.com/define/view.asp?id=71>

⁷ Source: http://www.marketingteacher.com/Lessons/lesson_what_is_marketing.htm

ANAC Marketing Department

The building blocks of the concept marketing department are based on **ANAC's** marketing requirements and well-known marketing theories. **ANAC** has to manage 2 levels of marketing:

- **Strategic Marketing** attempts to determine how an organization competes against its competitors in a market place. In particular, it aims at generating a competitive advantage relative to its competitors.¹
- **Operational Marketing** executes marketing functions to attract and keep customers and to maximize the value derived for them, as well as to satisfy the customer with prompt services and meeting the customer expectations. Operational Marketing includes the determination of the marketing mix, also known as the 4 P's: Product, Price, Promotion, and Place.¹

Although the concept of marketing is an organization-wide matter, the marketing department plays a vital role in managing the strategic and operational marketing. These marketing functions need to be assigned to a new **ANAC** marketing department. To implement a professional marketing department new functions need to be created and people assigned.

The concept marketing department will be described through roles & responsibilities, and assessed on implementation criteria. **Figure 7.3** depicts the conceptual organization chart of the concept marketing department.

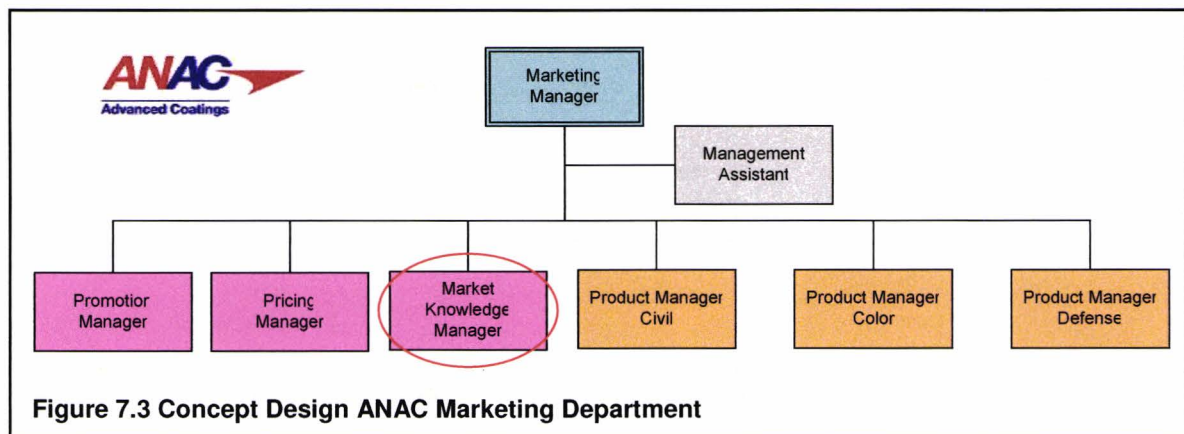


Figure 7.3 Concept Design ANAC Marketing Department

Roles and Responsibilities

The functions within the concept **ANAC** marketing department are described below.

➤ Marketing Manager

The marketing manager is responsible for developing market strategies designed to maximize **ANAC's** long-term profitability and coordinating the marketing mix. He therefore, delegates responsibility to and gets support from the managers below him; promotion manager, pricing manager, market knowledge manager and the product managers. These subordinates will report to him on a periodic basis. Furthermore, the marketing manager reports to the General Manager and will be part of the **ANAC's** top management teams (GMT, SMT).

➤ Market Knowledge Manager

The key function that needs to be created within **ANAC** and which will play a vital role in generating, disseminating and using market information, will be the market knowledge manager.

¹Source: Perreault et al. (2000)

The market knowledge manager will be in charge of selecting the most appropriate methodologies for market intelligence generation, and designing communication processes to enable market knowledge sharing with other functions and departments.¹ Furthermore, he will be responsible for the actual gathering and analysis of market intelligence. As such, he defines, strategizes and estimates the market potential and executes customer and competitor analysis. Despite the fact that there is no global (marketing) structure yet, the market knowledge manager needs to encompass the global coatings market, which includes all the defined focus markets. The market knowledge manager reports to the marketing manager and will take part in **ANAC's** top management teams (GMT, SMT).

This function deals with questions such as:

- Which market information do we need now and in the future? On what level?
- How do we collect and share this market information?
- Which aerospace and defense databases, magazines and reports should we use?
- How large is the market potential and our market share within our focus markets?
- How large is the market potential outside our focus markets?
- What are the customers (future) needs and requirements?
- What are our competitors doing and what are the trends?
- What are our biggest market opportunities and threats?
- Which employees need to visit customers, when, how often, cross-functional?
- How can the Capture the Market processes best be implemented?

As mentioned in the analysis phase the M&PC BU are starting to implement their Capture the Market processes throughout the BU with the aim to channel relevant, accurate and reliable market intelligence to those people making the decisions on future company strategy and the development of new products and services for the worldwide Marine & Protective market. At the startup of the project, **ANAC** chose not to be part of the Capture the Market project. However, if the implementation throughout the rest of the BU proves to be successful **ANAC** cannot stay behind. It might also be a matter of time before the BU urges **ANAC** to follow up these processes.

It is then highly recommended that the market knowledge manager will be assigned as the Champion¹ for implementing and following up the 'Capture the Market' processes. A necessary condition to adequately carry out this responsibility is that he will first receive intensive Champion training by the BU.

The seven Capture the Market processes which the market knowledge manager need to coordinate are given below. **Chapter 7.3** will go into more detail on these information processes.

1. Determine Customer Profiles
2. Determine Competitor Profiles
3. Determine the Impact of Regulation, Legislation and Approvals in the Market
4. Determine Technical and Engineering Advances
5. Determine the Impact of Economic Drivers on Market Changes
6. Determine Current and Forecast Market Size and Share
7. Determine Market Influences

➤ **Product Manager Civil**

The product manager civil is responsible for the development and positioning of **ANAC's** products in the commercial aerospace coatings market. The position of product manager civil is already filled for the EMEA region.

The functions included (amongst others) are:

- Product Management Strategy
- Product introduction in accordance with commercial management and R&D
- Rationalization of current product range
- Packaging issues and the coordination of it
- New label layouts; which labels to use, customer specific labels, design & layout and other label information.

¹ Champion: Responsible for the delivery of the project, leads and motivates the relevant stakeholders

- Managing range complexity
- Drive the organization through continuous product and relevant process improvements
- Major involvement in the Technology and Innovation (T&I) process
- Provide support to the promotion manager (Global Marketing Services)

➤ **Product Manager Defense**

The product manager defense is responsible for the development and positioning of **ANAC's** products in the defense coatings market. Tasks of the product manager defense are equivalent to those of the product manager civil. The defense and civil aerospace markets differ however significantly from each other. The position of product manager defense is already filled for the EMEA region.

➤ **Product Manager Color**

The product manager color is responsible for the development and positioning of 'color'. Color is one of **ANAC's** most important product features through which they create superior customer value. To give further weight to this unique selling point a function can be created to actively manage color and all its facets. A short while ago, the decision has been made to install a fulltime employee responsible for color within the current product management department as of January 1st 2008. He will be responsible for the EMEA region.

The functions included (amongst others) are:

- Determine color requirements of the market
- Mix-to-paint
- Development of global color database
- Special effects strategy
- Cooperation with R&D department on 'next generation' coatings
- Color training, internal and external
- Pigment selection
- Advise on waterborne line strategy

➤ **Pricing Manager**

The pricing manager will be responsible for **ANAC's** global pricing policy. The margins of **ANAC's** products are under heavy pressure from aggressive competitors. Similar competitive products are sometimes even 20% to 30% lower priced.

At the moment pricing policies are to some extent handled by product managers, but lack a thorough value analysis and global uniformity. As a result, (potential) customers often perceive the price of the products as too high. Next to that, customers around the globe pay different prices and receive different discounts for the same product, while at the same time transportation costs are not made transparent. It will be a matter of time before customers actively compare **ANAC's** prices and order their products from the lowest bidder. Needless to say, this will have a negative impact on **ANAC's** turnover and profit. The position of pricing manager has not been filled yet.

ANAC should make use of an active pricing policy. Pricing can be approached at three levels: the industry, market, and transaction level¹.

- Pricing at the industry level focuses on the overall economics of the industry, including supplier price changes and customer demand changes.
- Pricing at the market level focuses on the competitive position of the price in comparison to the value differential of the product to that of comparative competing products.
- Pricing at the transaction level focuses on managing the implementation of discounts away from the reference, or list price, which occur both on and off the invoice or receipt.

The pricing manager will deal with questions such as:

- How much do our customers *value* the products, services, and other intangibles that we provide?
- What are the pricing objectives?
- How do we categorize our customers on value?
- What prices are competitors charging?
- How important are customer price sensitivity and elasticity issues?
- What image do we want the price to convey?
- Should there be quantity discounts?
- Should prices change in various geographical areas (zone pricing)?

➤ **Promotion Manager**

The promotion manager will be responsible for disseminating information about **ANAC's** products, product lines, brands and company itself. Within **ANAC** this position is given the name **Marketing Services Manager**. The marketing services manager attends the SMT meetings, but is currently not assigned as an official member of the SMT.

The marketing services manager deals with questions such as:

- How do we want our customers to see us?
- What image do our products and brands need to convey?
- How do we reach our customers? (events, training days etc)

➤ **Management Assistant**

The management assistant is responsible for supporting the marketing department through organizational and administrative tasks. This position is already filled.

Diagnosis of Concept Design ANAC Marketing Department

The suggested measures for establishing a marketing department are evaluated in light of the criteria feasibility, acceptability and costs and benefits.

Feasibility

The feasibility of establishing a marketing department within **ANAC's** organization will largely depend on **ANAC's** ability to attain adequate human resources. To establish a solid marketing department new functions need to be created. These functions cannot all be filled internally. An important task for the Human Resources department, therefore, lies in attracting, evaluating and selecting skilled and experienced personnel to handle the new marketing functions. An important aspect would also be to recruit people that will enhance the market-oriented culture within the organization.

Considering budget and work space constraints it will not be very likely that **ANAC** will double its FTE's (Full Time Employees) regarding marketing positions on a short term. The position that therefore needs to be created and filled first is that of a **market knowledge manager**, as this function will play a vital role in driving the market orientation. Once this position is filled and other marketing positions such as the **pricing manager** come into place, there will be a need for a strong **marketing manager** that will manage these positions and its marketing activities.

Acceptability

The difficulty in establishing a marketing department within **ANAC**, especially with a global structure, lies mainly in the resistance to change within **ANAC's** top management. The standpoints of members within the Global Strategic Marketing and Technical Group (SMT) on market orientation and restructuring the organization differ significantly. **Figure 7.4** depicts a stakeholder analysis for a global marketing department. In this matrix the members of the SMT are assessed on their degree of influence and standpoint on a global marketing department. The member's position is represented by a colored bullet. It should be noted that these standpoints are based on interviews with people from **ANAC EMEA** (see also the Limitations paragraph in **chapter 8**).

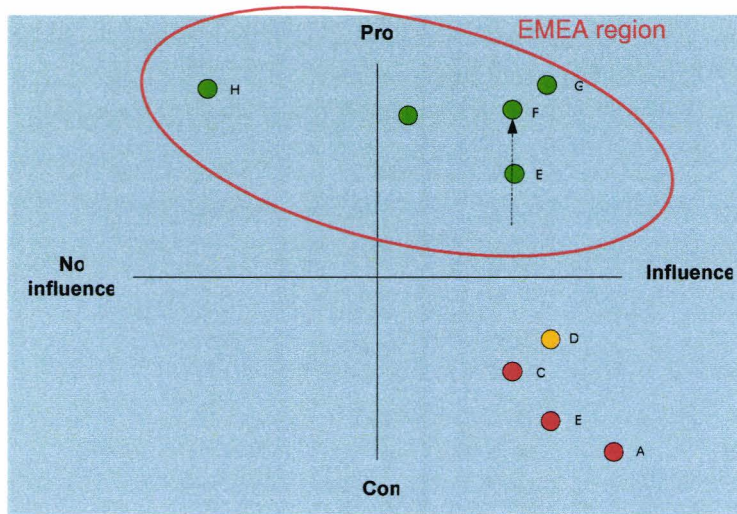


Figure 7.4 Stakeholder Analysis 'Global Marketing'

As the matrix shows members are divided in pro and con standpoints. Due to the fact that many influential team members, including the most influential member, do not support a global marketing department it is hard to bring about any global changes. Considering that support and commitment is absolutely necessary for successfully implementing a global marketing department consensus needs to be created.

The resistance to change is in this case largely caused by top management members who do not feel *the urgency to change*. They feel business is going well and there is no need to restructure or

strengthen the current organization. One way to overcome this is to let the afore mentioned **BI team** show the value of good market intelligence and/or to expose flaws in **ANAC's** current approach to the market and its customers. Next to this, they should emphasize that regardless of market intelligence that will be obtained (either internally or externally) the management team will maintain the decision making authority and, therefore, do not lose final control. The role of the marketing department is to generate and analyze market information, and to propose/ and execute adequate market strategies, but the management team maintains the final say.

If after persistent effort this barrier to change proves to be impossible to break through, an alternative measure would be to firstly strengthen the current product management department of the **EMEA region** (situated at the Sassenheim site). Members of the SMT who represent the EMEA region do support the establishment of a marketing department. Although this 'marketing department' would lack a global structure, it will still provide benefits for **ANAC EMEA**. The desired side effect of a successful transformation of the EMEA product management department into a marketing department is that all SMT members will be uniformly convinced of the value of a marketing department.

ANAC's product management department forms the basis for the concept design, as it is already responsible for an important part of marketing. The product management department currently consists of a manager product management, supported by a management assistant and 2 product managers.

If the SMT does not unanimously feel the urgency to change, the implementation of a global marketing department will not happen until changes take place in the composition of the SMT. This may take up to 3 years. Until then **ANAC EMEA** has no other choice than to sub-optimize its own organization.

The creation of new marketing roles and responsibilities will also have an impact on the communication structures. Cooperation between marketing department members and other members of the organization is critical for adequately executing the marketing concept. Proper introduction by top management of the market knowledge manager will increase acceptability of his newly created coordinating tasks. In order to avoid possible barriers to change such as sense of losing ownership or freedom by employees, it should be clearly communicated that this coordination is in the company' and employees' best interest.

Costs and Benefits

The benefits are clear. Creating roles means assigning responsibility, which makes it possible to plan activities and evaluate efficiency and effectiveness of how market information is managed.¹ More specifically:

- The marketing manager will support the development of market strategies designed to maximize **ANAC's** long-term profitability.
- The market knowledge manager will coordinate the generation, dissemination and use of market information so that **ANAC** can better anticipate developments in the market.
- The pricing manager will support a product's positioning and help **ANAC** achieve its financial goals by executing an active pricing policy.
- The product color manager will further develop one of **ANAC's** superior product qualities.

The greatest limitation when choosing to formalize a role such as the function of market knowledge manager, is the risk of lessening the sense of responsibility of the rest of the organization for consciously managing marketing knowledge. By continuous top management emphasis on the values of the market-oriented culture this can be withstood. **ANAC** employees need to be encouraged to carry out activities involving recognizing and integrating various knowledge bases to make market information emerge and become available for use. Keeping this role an informal one has the advantage of raising the level of commitment of each individual, making everyone realize how important one's own knowledge base is for the success of different activities.¹

The costs of establishing a marketing department will largely be incurred by the recruitment of new skilled marketing personnel and the related salary expenses. Next to that, physical work space needs to be created.

¹Source: Troilo (2006)

Validation Test

Research was carried out to validate the creation of new marketing functions. Considering time constraints, the validation was focused on the vital role of the market knowledge manager regarding market information. An important part of its future tasks (market research) was carried out to examine if he will, indeed, provide value for **ANAC**.

Further purposes of the validation were to make **ANAC** employees conscious of **ANAC's** insufficient market orientation, to examine the willingness to change and to create support.

The market research focused on one of **ANAC's** most profitable focus markets the Commercial Maintenance market. An Excel framework was set up to store and analyze the information provided by sales managers. Questions were asked about their customers, both from the viewpoint of the airlines (e.g. KLM) as well as from the paint companies (e.g. QAPS).

Valuable customer information was generated regarding fleet sizes, aircraft surfaces in square meters, market sizes, opportunity values, etc. The research showed that **ANAC** never explicitly prioritized their customers in terms of importance, market share and market opportunity. Sales managers supported that this should actually be done more structurally.

Figure 7.5 shows a valuable tool (Sales Platform) that is recently introduced within **ANAC** by a consultancy firm, which can be used to classify their customers. By visualizing **ANAC's** untargeted, visited and active customers, (sales) resources can better be prioritized and allocated, and market opportunities can be identified more systematically. Having adequate market intelligence available will support the usefulness of the tool.

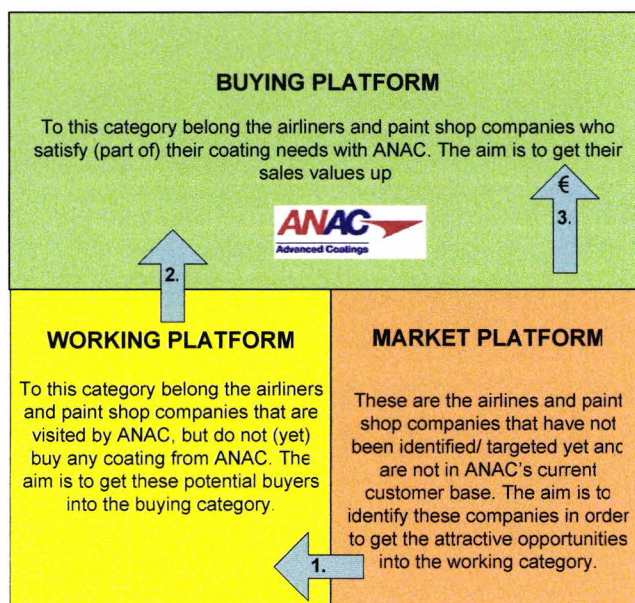


Figure 7.5 Customer Classification; Market, Working and Buying Platform

A few interesting findings from the validation are given below:

- Sales managers acknowledge **ANAC's** insufficient market orientation
- Sales managers will support a more systematic prioritization of customers
- **ANAC** does not supply to the top 4 airlines in the EMEA region
- **ANAC** supplies to ... airlines from the top 10 of American airlines
- Incorrect categorization of customers leads to a distorted image of sales revenue per focus market (e.g. OEM customers are marked in SAP as Maintenance customer)
- There are still many market opportunities within **ANAC's** active customers (market shares < 80%)
- Cabin coatings appear to be an interesting market opportunity for **ANAC**

These findings only show the tip of the iceberg of the kind of valuable market intelligence that can be generated. More valuable market intelligence can and should be generated and actively used so that **ANAC** can better anticipate developments in this market.

Overall, the validation test showed that active market research and analysis provides **ANAC** with valuable intelligence through which they will be more responsive to the market. This role should be assigned to the future function of marketing knowledge manager. The benefits of the other marketing functions could not be validated due to time constraints and practical issues, but will highly likely provide **ANAC** with real benefits when put into practice.

Likelihood of implementation

The table below indicates the likelihood of implementation for the corresponding marketing functions. The likelihood of implementation is based on interviews with influential management team members and in light of the design criteria.

Likelihood of Implementation	Within 1 Year EMEA	Within 3 Years GLOBAL
➤ Marketing Manager	Low	High
➤ Market Knowledge Manager	Medium	High
➤ Pricing Manager	Low	High
➤ Product Manager Color	High	High
➤ Promotion Manager	In place	In place
➤ Product Manager Civil	In place	High
➤ Product Manager Defense	In place	High
➤ Management Assistant	In place	High

For the likelihood of implementation a distinction is made between time period and regional scope. It is not very likely that significant changes will take place in the composition of the global management team in a time period less than 3 years. Unless the barriers to change can be overcome, changes are not to be expected in the global organization structure. The implementation of global marketing functions will then be of low likelihood. The likelihood for structural changes on a global level in 3 years is expected to be high either due to disappointing financial results and performance (and resulting change of standpoints), change of management composition or interference of the BU M&PC.

Changes in the marketing functions can be brought about more easily within the EMEA region, and even within a year, in some functions. The likelihood for the key implementation of the market knowledge manager is indicated as medium. This is due to the considerable effort needed to recruit the right person for such a high demanding role. People within **ANAC** EMEA are, however, convinced of the benefits this function will create. The acceptability will therefore be high. To fill the future global positions, it is recommended to first assess if positions can be adequately filled internally. Job requirements will include the appropriate knowledge and skills, ambitions, experience and personality.

Summary

The implementation of a marketing department within ANAC does, by no means, mean that the organization will then be fully market orientated. Market orientation comprises much more than defining structures and processes for a single department. Being market orientated is a concept that needs to be applied to the company as a whole. The development of a marketing department is, however, an important step in the right direction for ANAC. Barriers to change need to be overcome, new positions need to be filled and resources need to be made available to implement a global marketing department. If after persistent effort changes will not take place on a global basis, optimizing ANAC EMEA could be a (weaker) alternative in the first place.

7.3 Information System and Processes

This chapter covers the information systems and processes that will support **ANAC** with the generation, dissemination and use of market information.

Marketing management has various methods of measuring progress against set objectives. It is the responsibility of marketing managers - in the marketing department or elsewhere - to make sure that the execution of marketing strategies and marketing mixes achieves the desired goals and is done in a cost-efficient and effective manner. Marketing management, therefore, often makes use of various organizational control systems, such as sales forecasts, sales force and reseller incentive programs, sales force management systems, and customer relationship management tools (CRM). CRM will be handled further in this chapter.

Firms often do not know what they know. The same goes for **ANAC**; they have good systems (SAP) for storing and locating routine manufacturing, sales and accounting data but, other than that, **ANAC** managers and employees have difficulties figuring out if certain (market) information is available in the organization and where it is located. Valuable market information is not assembled in one convenient location and often information is only stored in people's heads. Information processes need to be formulated that guide the market information flow, from generation to actual use. The 'Capturing the Market' project is aimed at managing these market information processes.

'Capturing the Market'

The 'Capture the Market' processes of the M&PC BU aim to channel relevant, accurate and reliable market intelligence to those people making the decisions on future company strategy and the development of new products and services for the worldwide Marine & Protective market.

It is highly recommended that **ANAC** will closely monitor and evaluate the implementation of these processes throughout the M&PC BU and learn from it for its own benefit. Typical questions that **ANAC** needs to answer are: how can the processes best be implemented, who should be coordinating it, what are the benefits and concerns, how can we learn from start-up problems, how do adapt the processes to our own organization, how long will the implementation take?

▪ CTM processes

The 7 information processes formulated by the CTM team are briefly given below (with their desired output). Each of these processes are drawn up in detail by means of schematic process layouts. These layouts formulate the information flow, the inputs, responsibilities and desired outputs.

1. Determine Customer Profiles

An understanding of current customer wants and needs, a prediction of future wants and needs through an opportunity and threats analysis.

2. Determine Competitor Profiles

Collection and analysis of information regarding, for example, financial results, strategy, product attributes, technologies, market shares, distribution network, will provide a better understanding of the competitor.

3. Determine the Impact of Regulation, Legislation and Approvals in the Market

A clear understanding of the relevant current and upcoming legislation and regulations affecting coatings, customers and the market.

4. Determine Technical and Engineering Advances

Intelligence about customers technology advances (design changes, application advances, patents activity, non patent technology) and technology advances in coatings (trends in technology advances, patents activity, new raw material development, H&S information on new materials, and recommendation for possible new products).

5. Determine the Impact of Economic Drivers on Market Changes

Economic drivers that should be considered include market cost drivers (e.g. raw material costs, oil prices) and economic information.

6. Determine Current and Forecast Market Size and Share

Output should include a summary of the focus market size according to the required deliverable such as volumes, market value and market share percentages.

7. Determine Market Influences

An understanding of environmental issues, public opinion, health & safety issues, political changes, trade agreements/ blocs.

ANAC needs to form a team, including a champion and sponsor, to effectively implement these (modified) processes within the organization; available time, resources and commitment will be vital for its success.

Data Warehouse

ANAC needs to develop a central data warehouse where all the necessary market intelligence, including all customer-related information will be stored and can be retrieved. Creating a database that is guided by market intelligence is a critical component of a firm's attempts to create customer assets through long term relationships.⁵

The data warehouse should be accessible to relevant functions such as sales, customer service, and **ANAC's** future marketing department. This data warehouse may well be based on the already existing SharePoint site. Next to a digital data warehouse, **ANAC** should also form a paper data warehouse by storing and organizing their magazines, reports and other tangible market information sources.

SharePoint, **ANAC's** web based IT-tool, can very well be used for this. Until now, SharePoint has not been used effectively yet. **ANAC's** management should arrange adequate training on how to use this program and how to reap the benefits from it. The Capture the Customer's Feedback team is starting a pilot which will make use of SharePoint.

Customer Relationship Management

To maintain customer relationships, in addition to creating an organizational culture and environment that fosters the sharing of information between **ANAC** and their customers, it is vital that **ANAC** uses this information to adequately respond to customers needs. Customer information is the raw material for **ANAC** to provide insights and develop strategies to maintain and sustain relationships.⁴

Customer Relationship Management (CRM) can be defined as "a process that maximizes customer value through ongoing marketing activity founded on intimate customer knowledge established through collection, management and leverage of customer information and contact history."¹ **Figure 7.6** depicts the framework of CRM; relational information processes (the routines that shape how customer information is managed) influence organizational performance through customer relationship performance, while CRM technology is a supportive enabler of the design and implementation of relational information processes.

CRM technology components include front-office applications that support sales, marketing, customer service, a data warehouse, and back-office applications that help integrate and analyze the data.²

Sales support is designed to help the sales force acquire and retain customers, reduce administrative time, and allow efficient management of accounts.³ **ANAC's** sales force needs be provided with customer and competitor information. Sales can be further supported by providing them with up to date information on product availability and delivery.

ANAC can implement CRM technology systems as a means to improve the effectiveness of relational information processes. It first needs to be assessed if there is a need and readiness for this.

¹ Source: Barran, Zerres and Zerres (2006)
² Source: Greenberg (2001)
³ Source: Greenberg (2001)
⁴ Source: Rigby et al (2002) Jayachandran et al (2004)
⁵ Source: Berger, Bolton, Bowman, Briggs, Kumar, Parasuraman, and Terry (2002)

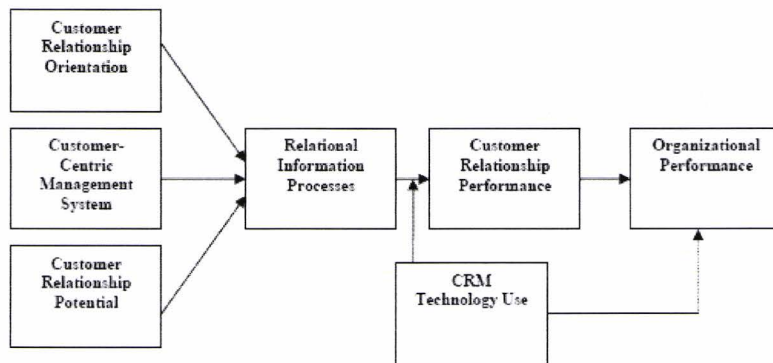


Figure 7.6 CRM Framework (2004)

▪ **CRM Implementation**

ANAC can use the following guidelines for the implementation of CRM:

1. Assess customer relationship potential to determine the need for customer relationship management.
2. Examine customer relationship orientation and customer-centric management systems to verify the organization's readiness for customer relationship management.
3. If ready, design and implement relational information processes.
4. Use CRM technology to support relational information processes.
5. Measure the effectiveness of customer relationship management through customer relationship performance and organizational performance.

▪ **Customer Relationship Potential**

To determine if **ANAC** would benefit from a customer relationship management strategy the customer relationship potential needs to be assessed. The customer relationship potential relates to the economic and social benefits of customer relationships. In **ANAC's** case, all motivators can be answered positively, which implies advantages in pursuing a customer relationship management strategy:

- **ANAC** sells products and/or services that are purchased frequently by customers.
- **ANAC** sells complex products and/or services.
- **ANAC** sells high value products and/or services.
- **ANAC's** products can be customized to meet specific customer needs.
- **ANAC** sells multiple products and/or services that can be used by the same customer.
- It is possible to communicate with end-users relatively easy.
- It is possible to collect customer information relatively easy.

Due to time constraints the subsequent steps for the implementation of CRM need to be carried out by **ANAC** itself.

▪ **'Capturing the Customer's Feedback'**

A Business Improvement project, complementary to the 'Capturing the Market' processes, just started up at **ANAC** with the aim to capture the customers' feedback. The purpose of the project is to capture customer feedback on issues such as customer service and product quality which, until now, has never been done. The BI team is going to perform a small scale trial in February 2008. First, a selection will be made of which customers to approach. These customers will then be called and asked if they would like to cooperate with filling in a customer feedback questionnaire. If yes, the customer will be called back on the agreed date and time to carry out the questionnaire. This task will be executed by an external research company.

Three types of questionnaires will be used: a sales questionnaire, a customer service questionnaire and a technical support questionnaire, all aimed at capturing different aspects of customers' feedback. SharePoint will be the IT-tool used to support these information processes.

Diagnosis Information System and Processes

The suggested measures for an Information System and Processes are evaluated in light of the criteria feasibility, acceptability and costs and benefits.

Feasibility

When designing or renewing a market information system **ANAC** needs to take, among others, the following factors into account for a successful implementation.

Openness, interconnectivity and richness

Openness means that all relevant organizational members are able to access the information system. Openness also refers to the system's ability to handle different data types to allow diverse knowledge configurations to be shared. Interconnectivity means the capacity with other systems, to access different knowledge nodes, in order to expand the information base and enhance the sharing process. The third characteristic is the richness of components. An information system should not simply be a collection of data, but should also contain decision support systems to make use of this data¹ (troilo) Preliminary research showed that implementing customer relationship management and relational information processes are feasible without complex CRM technology⁴, such as for example **ANAC's** SharePoint.

Human resources

Next to the technological requirements, **ANAC** needs to make human resources available. **ANAC's** management needs to assign specific responsibilities when it comes to managing the information system and processes, such as coordinating the capture the market processes (see also Market Knowledge Manager) and capturing the customers' feedback. These people need to have the appropriate skills (training) and available time to execute these tasks.

Acceptability

Designing an open system with rich components that facilitates interconnectivity does not guarantee effective and efficient sharing if trust in the information system is lacking¹.

Trust in the data supplier

Information will not be shared and used when trust in the data supplier is lacking. **ANAC's** management needs to create a culture in which values such as trust, openness, respect and collaboration are present (see **chapter 7.1**). Next to this, they should carefully select the people who need to manage these information processes. Early success will increase the degree of confidence people will have in the data supplier.

Trusting technological infrastructures

Several studies show that little trust in the basic information structure (in **ANAC's** case for example SharePoint) or in electronic support systems are factors which limit the use of such systems, and as a result, the use of information they produce.¹ **ANAC** should, therefore, provide training to the relevant people concerning when and how to use SharePoint.

Information overload

The danger of generating all kinds of market information is: information overload. When too much data is generated, people have difficulties distinguishing between valuable and invaluable data. Next to this, employees will soon become demotivated when putting effort into generating irrelevant data. **ANAC**, therefore, first needs to thoroughly assess which information needs to be generated and shared and explain how this information will be used to benefit the company. Sharing and using specific market information which is useful for performing specific activities is much more important than just sharing as much as possible.

Costs and Benefits

ANAC must be careful that market information will not be generated and shared just for the sake of it in the sense of "the more, the better", as this will result in costs that highly outweigh its benefits. Costs will be incurred by the time and resources that need to be put in to implement and manage the information processes. The benefit of this implementation will be that market information can be systematically stored, shared and used, so that **ANAC** can better anticipate on the market.

Source¹: Ostilio and Troilo 2001

Chapter 8. Conclusions and Recommendations

In this final chapter the conclusions and recommendations of the research project will be provided. Next to this, the limitations of the research and implications for future research will be given.

Conclusions

At the beginning 2007, **ANAC** set its ambitious long term goals. At the core of the strategy is organic growth either within new or existing markets and regions of the world. To achieve substantial and sustainable growth, it is vital that **ANAC** completely understands the market (**chapter 3.1**)

This research project made clear that **ANAC** should improve its culture, structure and processes to be better able to systematically generate, disseminate and use market information in order to make market-based decisions on company strategy (**3.2 & 3.3**).

Market orientation is the ability of the organization to generate, disseminate, and use superior information about customers and the competitors. A substantial market orientation must be the foundation of a business' competitive advantage strategy. The implementation of a market orientation strategy leads to improved financial and marketing performance. **ANAC** should, therefore, improve its organization in order to become more market orientated and better able to reach the set goals and meet the competition (**5**).

For any change to take place, **ANAC** must first perceive a gap between its current and its desired situation. This was done by making use of the organizational life-cycle model. **ANAC's** current situation shows great similarities with companies residing in the maturity phase; substantial size advantage over most of its competitors, a rather conservative strategy, low anticipation on competitor's strategies, slackening growth rate in traditional markets (**6.1**).

Regarding **ANAC's** current abilities to process market information, the following conclusions can be drawn:

- **ANAC** needs to improve its skills (*"I don't have the appropriate marketing background for this"*), attitude (*"I don't see the use of it"*), make available time (*"I'm already loaded with work"*) and create procedures (roles and responsibilities have not been clearly defined) to be better able to structurally generate the required market intelligence.
- **ANAC** should better define what and how market information needs to be shared and stored and who is responsible for the dissemination and storage of this information. Employees do not make use of an IT tool such as SharePoint and available market information is often only stored in people's heads.
- As a result of improving the generation and dissemination of market information, **ANAC** will be able to make effective use of market information. It is often this last event that separates the winner from the rest of the competition.

An important underlying reason why these market information processes are not structurally managed yet can be found in **ANAC's** history and organizational culture. Employees indicated that **ANAC** has a highly sales-driven culture since its foundation. This culture has taken them to the place where they are now; market leader and highly valued supplier of aerospace coatings with great financial results. The danger for **ANAC**, however, lies in becoming complacent and less adaptive to market forces.

ANAC's current orientation is characterized by a short-term tactical rather than a long-term strategic orientation. Furthermore, it relies on historically successful approaches to face new problems and opportunities. Within the organization there sometimes is insufficient shared understanding of what **ANAC** is trying to accomplish and how this needs to be done.

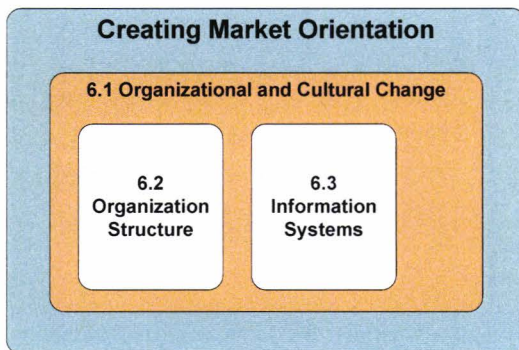
ANAC's desired situation is that it will grow faster than the market. Due to its ambitious goals and competitive environment the relevance of marketing is major. To become a marketing-led organization **ANAC** needs: a marketing database, an active business plan, marketing representation at board level and a marketing department. **ANAC** is realizing more and more that it needs to change and things are already beginning to change for the better (**6.2**).

Clear strategies need to be formulated for **ANAC's** six global focus markets. The complexities of these dynamic and competitive markets make it necessary to continuously scan and analyze the market and its environment for key threats and opportunities. **ANAC** needs a more analytical, reflective and participative approach to decision making, which is more based on thorough analysis and facts than on opinions and gut feeling.

The fact that **ANAC** set up numerous Business Improvement projects, such as 'Capture the Market', 'Targeting Market Growth' and 'Capture the Customer's Feedback', as well as having created new functions such as that of product manager color, underlines that **ANAC** is already changing in the right direction.

📌 Recommendations

ANAC can create a market-orientated culture through organizational and cultural change. Changing the organization culture is the first step in becoming market oriented (7.1): it forms the basis to bring about improvements in the organization structure and information processes. These changes need to be embedded in the new set of shared values, norms and understanding. **Chapter 7.2** handled the concept design for strengthening **ANAC's** organization structure. **Chapter 7.3** described the information processes that support the generation, dissemination and utilization of market information.



Recommendations are provided below with regard to the organizational and cultural change, organization structure and information system and processes.

1. Organizational and Cultural Change

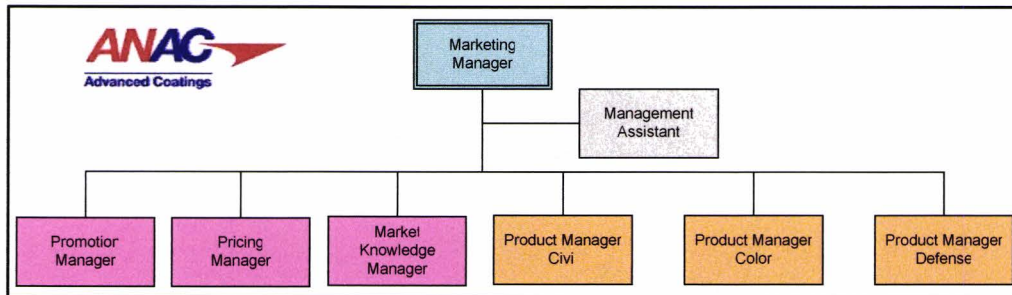
Making **ANAC** more market oriented is essentially a process of cultural transformation. **ANAC's** BI team can create cultural change by educating all organizational members about new market-oriented values. Furthermore, cultural change requires direct contact with the market, providing **ANAC's** employees with shared understanding and purpose. The cross-functional and organization-wide collaboration brings about a culture in which all employees show enthusiasm to serve the market and, as such, provide benefits for the company as a whole. **ANAC** should undertake the following measures to become market oriented (7.1):

1. **Top Management Focus** is required to begin and lead the process of becoming more market oriented. A team of **ANAC's** influential stakeholders needs to be formed, a so-called Business Improvement team, to officially challenge the current organization and come up with new market oriented values and norms. The willingness to invest in time and resources (people, budgets) is essential.
2. **Interdepartmental Cooperation** is essential. **ANAC** needs to create more shared understanding and meaning by working cross-functionally and by frequently sending cross-functional teams into the market to meet customers, distributors and influencers.
3. **Reward Systems** need to further align employees' incentives with those of **ANAC's** organizational goals as a whole. In doing so, employees do not have to make a trade-off between their personal interests and those of the company.
4. **Monitoring Performance** against objectives for improvement in important market metrics. For example customer satisfaction and market share metrics. Effectively, this can also be coupled to the reward system.

2. Organization Structure

Changing the organization structure of the company to align it with the desired organizational culture is recommended. **ANAC** needs to assign roles and responsibilities that will drive a market orientation (7.2).

ANAC therefore needs to establish a Global Marketing Department within the organization. A marketing department will strongly improve **ANAC's** capabilities to generate, disseminate and make use of market intelligence.



Considering budget and work space constraints it will not be very likely that **ANAC** will double its FTEs (Full Time Employees) regarding marketing positions in the short term. The position that, therefore, needs to be created and filled first is that of **market knowledge manager**, as this function will play a vital role in driving the market orientation.

The market knowledge manager will be in charge of selecting the most appropriate methodologies for market intelligence generation, and designing communication processes to enable knowledge sharing with other functions and departments.¹ Next to that, he will be responsible for the actual gathering and analysis of market intelligence. He needs to be an official member of **ANAC's** management teams.

Once this position is filled and other marketing functions such as the **product manager color** and the **pricing manager** come into place, there will be a need for a strong **marketing manager** that manages these positions and its marketing activities. The recruitment for these marketing positions lies in the hands of the human resources department. In order to fill future global positions, it is recommended to first assess if positions can be adequately filled internally. Job requirements will include the appropriate knowledge, skills, ambitions, experience and personality.

3. Information System and Processes

ANAC needs to implement an adequate information system and information processes that provide support for the generation, dissemination and use of market intelligence (7.3).

Firms often do not know what they know. The same goes for some part for **ANAC**; it has good systems (SAP) for storing and locating routine manufacturing, sales and accounting data, but other than that **ANAC** managers and employees have difficulties figuring out if certain (market) information is available in the organization and where it is located. Valuable market information is not assembled in one convenient location and often information is only stored in people's heads.

Processes need to be implemented that guide the market information flows, from generation to actual use. The 'Capturing the Market' project is aimed at managing these market information processes. It is highly recommended that **ANAC** will closely monitor and evaluate the implementation of these 'Capturing the Market' processes throughout the M&PC BU and learn from it for its own benefit.

ANAC needs to develop a central data warehouse where all the necessary market intelligence (including all customer-related information) will be stored and can be retrieved. The data warehouse should be accessible to relevant functions such as sales, customer service, and **ANAC's** future marketing department. This data warehouse may well be based on the already existing SharePoint site. Next to a digital data warehouse, **ANAC** should also form a physical data warehouse by storing and organizing their magazines, reports and other tangible market information sources. Market analysis can then be performed more easily.

ANAC's 'Capturing the Customer's Feedback' project is a good step in the right direction of actively managing customer relationships. When the small scale trial proves to be successful, further enhancements in the area of customer relationship management can be made.

Top 10 Recommendations

The table below briefly summarizes and prioritizes the most important recommendations. They all aim to develop ANAC's market orientation. The more favorable the feasibility, acceptability, costs and benefits of a certain action, the higher its priority to put it into action. The more actions will be taken, the more market oriented ANAC will become. It is advised that ANAC will put, at least, the first 5 recommendations into action. *Benefits are determined relative to each other and outweigh the costs.

Priority	Action to develop Market Orientation	Feasibility	Acceptability	Costs	Benefits
1	Form a BI team to come up with new market oriented values and norms.	Medium	Medium	Low	High
2	Send cross-functional teams into the market more structurally and frequently.	Medium	Medium	Medium	High
3	Develop 'Capturing the Market' project.	Medium	High	Medium	Medium*
4	Develop 'Capturing the Customer's Feedback' Project.	Medium	High	Medium	Medium*
5	Establish a Global Marketing Department within the organization.	Medium	Medium	High	High*
6	Further align employees' incentives with those of ANAC's organizational goals.	Medium	High	Low	Medium*
7	Develop a central data warehouse where all market information can be stored and retrieved.	Medium	High	Medium	Medium*
8	Monitor performance against objectives for improvement in important market metrics (e.g. market share, customer satisfaction).	Medium	High	Medium	Medium*
9	Develop 'Targeting Market Growth' project.	Medium	Medium	Medium	Medium*
10	Create a physical data base for storing tangible market information sources (e.g. magazines)	High	High	Low	Low*

In conclusion, a strong market orientation will allow ANAC to better anticipate developments in the market and attain positive results. This market orientation can only be brought about when ANAC achieves two general aims. Firstly, ANAC must adopt cultural traits supporting the market orientation. Secondly, ANAC must develop the resources, capabilities, organizational design and systems capable of translating the philosophy of market orientation into a consistent set of processes, activities and behaviors. ANAC's top management plays a vital role in this; it needs to overcome barriers to change, guide and lead the process and make adequate resources available.

The fact that ANAC sets up numerous Business Improvement projects, such as 'Capture the Market', 'Targeting Market Growth' and 'Capture the Customer's Feedback', as well as creating new functions such as that of product manager color, underlines that ANAC is already changing in the right direction. If ANAC continues to put in effort and brings about changes, a bright future lies ahead of it.

In brief, this project delivered:

- ✚ an in-depth description of ANAC's current and desired situation
- ✚ a company awareness that ANAC needs to become more market oriented
- ✚ a roadmap to create a market-oriented culture
- ✚ a concept design for a global ANAC marketing department
- ✚ recommendations on how to improve ANAC's information system and processes

Limitations and Implications for Future Research

This paragraph handles the limitations of the research carried out and the implications for future research.

- **Restricted Management Team meetings**

One of the limitations of the research was that **ANAC's** management team meetings (EMT, SMT, GMT) could not be attended personally. These meetings are restricted to people who are official members of the team. As a result, no observations on content, interactions and social, emotional and political issues could be made during these meetings. Information on how and what issues are discussed came from one-to-one interviews with members afterwards. To increase reliability, as many members as possible were interviewed.

- **EMEA Perspective**

The research took place at the **ANAC** EMEA Headquarters in Sassenheim. Due to physical distance and time constraints, no **ANAC** members of the Americas and Asian-Pacific region were interviewed. As a result, the findings from interviews with **ANAC** managers and employees could be biased by EMEA-based viewpoints. To minimize the potential bias various managers, who also take part in the global and strategic teams, were interviewed. They are aware of the opinions and viewpoints of other regional managers. The risk of incomplete or less accurate capturing of standpoints however still exists. Nevertheless this does not harm the suggested recommendations; regardless of the viewpoint, it remains highly recommended that **ANAC** takes adequate measures to improve its market orientation.

- **Future Research**

This research focused on recommending how **ANAC** can become more market oriented. **ANAC** was assessed on its abilities to generate, disseminate and use market information. The next question is if **ANAC** has the internal capabilities to actually meet the uncovered market wants and needs and execute the required market driven actions. The focus was placed on the establishment of a marketing department, but how do the other functional departments develop and relate to each other? Since a chain is as strong as the weakest link, other (potential) bottlenecks need to be identified and solved too.

Research can, for instance, be focused on the following questions: can R&D develop the demanded complex coatings? Does production have the capacity and resources to produce on time and with the right quality? Can the sales force persuade decision makers either to become a customer of **ANAC** or to remain an **ANAC** customer? Why can't we deliver our products to the customer on the agreed delivery date? A graduation student can be assigned to one of these future research topics (see also next point).

Personal Reflection

On March 5th 2007 I started my graduation project at Akzo Nobel Aerospace Coatings (ANAC) in Sassenheim, which came to an end ten months later. It has been a great experience for me. Not only because of putting into practice all the knowledge and skills I have learned during my studies at the Technische Universiteit Eindhoven, but also because of being involved in the business processes of a highly successful and valued multinational company.

Before I started my graduation project I had an intake interview with Len Warmerdam and Robert van Kooperen, product managers at ANAC. The sponsor of the project was Ian Walker, general manager of ANAC EMEA. The project assignment was to develop a methodology on how to evaluate potential markets and opportunities, primarily aimed at the land defense industry. The nature of the assignment, the good company name, the positive feeling I had with my future supervisors and the fact that I was told that I would probably have to travel regularly to interview ANAC employees, made me very enthusiastic and I decided to graduate at ANAC.

From the beginning I felt very welcome within the company; ANAC has an open culture, in which I could move around freely. Doors were always open, and employees were very supportive and enthusiastic to help me during my project. Even people from the highest positions want to be addressed with their first name from the start.

After a few weeks, due to internal communication issues, both the assignment and my supervisor changed. The start of my project could, therefore, have been better, but this type of thing is not uncommon with graduation projects.

Some time later Robert, my primary supervisor, left the company and my secondary supervisor Tsjip Boersma took over my guidance. Although I was surprised to hear Robert was leaving the company, we all agreed to continue the road we were following. Tsjip proved to be a very capable and committed supervisor with a strong personality. He left me the responsibility and freedom to execute the project the way I thought was best while always being available for discussions and helping me keep on the right track. I appreciated his way of guiding me very much.

During the last few months of my project I also received good support and feedback from the successor of Robert, Kees Bodegom. I experienced our talks about ANAC, but also besides ANAC, to be very pleasant.

I've been told quite some times by graduated students how writing a thesis goes with ups and downs. I now experienced it myself too. There were times I found it difficult to find inspiration to write or to motivate myself. However, I never gave up, and there was always light at the end of the short tunnel! This light was provided by my university supervisors, my company supervisors, my fellow students, my friends, myself, or sometimes simply just by time.

The project at ANAC has taught me a lot. Even though I already did various apprenticeships during my studies, a different company and situation always brings in new and valuable experiences: I had to personally manage a long term project for the first time, had talks with employees from all ranks and functions, experienced how it is to work alone in your own office, how to cope with disappointments and, in the end, the feeling of contentment in having accomplished something.

I feel glad to have contributed to shifting ANAC's mindset and creating awareness that ANAC needs to become more market oriented. It was very interesting and pleasing to see how certain people's viewpoints changed over the course of time. In the beginning of the project, for example, marketing was often merely seen as 'developing brochures', instead of a vital company function that supports decision-making for developing company strategy.

I think the conclusions and recommendations in this thesis provide ANAC with a base that supports its effort to become more market oriented. The fact that ANAC already set up numerous Business Improvement projects, such as 'Capture the Market', 'Targeting Market Growth' and 'Capture the Customer's Feedback', as well as having created new functions, such as product manager color, underlines that ANAC is definitely changing in the right direction.

In the end, unfortunately, I couldn't perform much research abroad. I had been very much looking forward to that. Effectively, I went abroad for an interview once; in Newcastle I interviewed a Business Improvement Champion, which was a valuable and pleasant experience. Since resources were not available, my research was mainly based on interviews with employees situated at the Sassenheim site. I think the research would have been more complete if I could also, personally, capture the viewpoints of ANAC employees residing abroad.

It is good to see that ANAC continues to take students into the company. I think students bring in valuable knowledge, skills, time and independence. Especially the last feature is very valuable and difficult to obtain within the company itself. Before taking on students, the company should already have clearly discussed what topic it wants to have researched, who is responsible for that and make resources available, such as, a well-located working space available. Furthermore, a project needs top management support.

To sum up, I had a great experience within the company, in which I saw and learned a lot. On top of that, I was very flattered to be offered a job by ANAC. Unfortunately, I had already made up my mind to follow my wish to spread my wings abroad...

I would like to sincerely thank again all ANAC employees and trainees I spoke with, had lunch with and/or had fun with! In particular, my company supervisors, Ian, Tsjip, Kees Robert, Len, and also Robert Rijnsburger for taking me with him to a Schiphol maintenance hangar!

Dhani Elprana

Literature

Articles

- Alam, I. (2005), Fieldwork and data collection in qualitative marketing research, *Qualitative Market Research*, 8(1), 97-111
- Baran, R., Zerres, C. and Zerres, M. (2006), Customer Relationship Management, *free-learning summary*
- Cooper, R.G. (1994), New Products: The Factors that Drive Success, *International Marketing Review*, 11(1), 60-76
- Day, G.S. (1994), The Capabilities of Market-Driven Organizations, *Journal of Marketing*, 58(4), 34-52
- Day, G.S. (1999), Creating a Market-Driven Organization, *Sloan Management Review*, 41(1), 11-21
- Elbertsen, L., Benders, J., and Nijssen, E. (2006), ERP use: exclusive or complemented?, *Industrial Management & Data Systems*, 106(6), 811-824
- Gebhardt, G.F., Carpenter, G.S. and Sherry Jr, J.F. (2006), Creating a Market Orientation: A Longitudinal, Multifirm, Grounded Analysis of Cultural Transformation, *Journal of Marketing*, 70(11), 37-55
- Green Jr, K.W., Imman, R.A., Brown, G. and Hillman Willis, T. (2005), Market Orientation: relation to structure and performance, *The Journal of Business & Industrial Marketing*, 20(6), 276-284
- Greiner, L.E., (1998), Evolution and Revolution as Organizations Grow, *Harvard Business Review*. May-June, 55-67
- Gresham G., Hafer, J. and Markowski, E. (2006), Inter-functional Market Orientation Between Marketing Departments and Technical Departments in the Management of the New Product Development Process (2006), *Institute of Behavioral and Applied Management*
- Griffin, A. and Page, A.L. (1996), PDMA Success Measurement Project: Recommended Measures for Product Development Success and Failure, *Journal of Product Innovation Management*, 13, 478-496
- Gummesson, E., (2003), All research is interpretive, *The Journal of Business & Industrial Marketing*, 18(6/7), 482-492
- Gummesson, E. (2005), Qualitative research in Marketing: Roadmap for a wilderness of complexity and unpredictability, *European Journal of Marketing*, 39 (3/4), 309-327
- Hurley, R.F. and Hult, T.M. (1998), Innovation, Market Orientation, and Organizational Learning: an Integration and Empirical Examination, *Journal of Marketing*, 62(3), 42-54
- Jaworski, B.J. and Kohli, A.K. (1990), Market Orientation: The Construct, Research Propositions, and Managerial Implications, *Journal of Marketing*, 54(2), 1-17
- Jaworski, B.J. and Kohli, A.K. (1993), Market Orientation: Antecedents and Consequences, *Journal of Marketing*, 57(3), 53-69
- Jaworski, B.J., Macinnis, D.J. and Kohli, A.K. (2002), Generation Competitive Intelligence in Organizations, *Journal of Market-Focused Management*, 5(4), 279

- Jayachandran, S., Sharma, S., Kaufman, P. and Raman, P. (2004), The Role of Relational Information Processes and Technology Use in Customer Relationship Management, *Journal of Marketing, Special Section on Customer Relationship Management*, May 12
- Kazanjian, R.K. (1988), Relation of Dominant Problems to Stages of Growth in Technology-Based New Ventures, *The Academy of Management Journal*, 31(2), 257-279
- Kohli, A.K., Jaworski, B.J. and Kumar, A. (1993), MARKOR: A Measure of Market Orientation, *The Journal of Marketing Research*, 30(4), 467-477
- Miller, D., Friessen, P.H. (1984), A Longitudinal Study of the Corporate Life Cycle, *Management Science*, 30(10), 1161-1183
- Ottum, B.D. and Moore, W.L. (1997), The Role of Market Information in New Product Success/Failure, *Journal of Product Innovation Management*, 14, 258-273
- Siguaw, J.A., Brown, G. and Widing, R.E. (1994), the Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes, *Journal of Marketing Research*, 31(1), 106-116
- Slater, S.F., Narver, J.C. (1990), The Effect of a Market Orientation on Business Profitability, *Journal of Marketing*, 1990, 54(4), 20-35
- Simpson, M., Padmore, J., Taylor, N and Frecknall-Hughes, J. (2006), Marketing in small and medium sized companies, *International Journal of Entrepreneurial Behaviour and Research*, 12(6), 361-387
- Slater, S.F., Narver, J.C. (1995), Market Orientation and the Learning Organization, *Journal of Marketing*, 59(3), 63-73
- Slater, S.F., Narver, J.C. (2000), Intelligence Generation and Superior Customer Value, *Academy of Marketing Science Journal*, 28(1), 120-126
- Stoica, M., Liao, J. and Welsch, H. (2004), Organizational Culture and Patterns of Information Processing: The Case of Small and Medium-Sized Enterprises, *Journal of Developmental Entrepreneurship*, 9(3), 251-265
- Westphal, J.D., Gulati, R. and Shortell, S.M. (1997), Customization or Conformity? An Institutional and Network Perspective on the Content and Consequences of TQM Adoption, *Administrative Science Quarterly*, 42, 366-394

Text books

- Alsem, K.J. (1997), *Strategische Marketing Planning: Theorie, Technieken en Toepassingen*, Houten: Educatieve Partners Nederland
- Hutt, M.D., Speh T.W. (1992), *Business Marketing Management: A Strategic View of Industrial and Organizational Markets*, Orlando, Florida: The Dryden Press
- Kotler, P., Keller, K.L. (2006), *Marketing Management*, 12th ed. Pearson Prentice Hall
- Michel, D., Naudé, P., Salle, R. and Valla, J.P. (2003), *Business-to-Business Marketing*, New York, NY: Palgrave Macmillan
- Mintzberg, H. (1983), *Structure in Fives: Designing Effective Organizations*, Englewood Cliffs, New Jersey: Prentice-Hall, Inc
- Perreault, W.D., McCarthy, E.J., Parkinson, S. and Stewart, K. (2000), *Basic Marketing*, Turin: McGraw-Hill International (UK) Unlimited
- Troilo, G. (2006), *Marketing Knowledge Management: Managing Knowledge in Market Oriented Companies*, Cheltenham: Edward Elgar Publishing Limited

Websites

- www.airbus.com
- www.akzonobel.com
- www.anac.com
- www.boeing.com
- www.bombardier.com
- www.embraer.com
- www.learnthat.com/define/view.asp?id=71
- www.marketingteacher.com/Lessons/lesson_what_is_marketing.htm
- www.ppg.com
- www.speednews.com
- www.wikipedia.org

Other sources

- Akzo Nobel Year Report 2006
- ANAC EMEA Communication Session 2007
- Atlas Database 2007
- Global Coatings Report 2006
- Market Analysis Tool
- Market Analysis May 2007
- Market Share Survey Summary 2007
- M&PC Capturing the Market project Positioning Paper 2007
- SAP Sales Results 2006
- S. De Bruin graduation report 'Customer Perception' 2005
- STEM Marketing Excellence Scan 2007
- VZM Management Services 2007

Appendix

1. Coatings Group

Akzo Nobel is the biggest coatings company in the world, having developed and supplied innovative coatings products for more than 200 years. The Coatings Group commands leading market positions in almost all its businesses. With operational bases in 60 countries, Akzo Nobel's Coatings businesses employ around 30,000 people. Research and development plays a vital role, underlined by the company's continued success in adding groundbreaking products to its technology-driven portfolio of global brands. Their activities are divided into four Business Units:

Business Unit	2006 Sales €m	Description
Decorative Coatings	2,287 ²	Decorative and protective products for both the architectural and interior design sectors, including paints, adhesives and leveling compounds.
Industrial Activities	1,959	Major world-wide supplier of wood and coil coatings for industrial markets, specialty coatings for plastics and powder coatings for a wide range of industrial uses.
Car Refinishes	922	Paints, services and specialized equipment for the car repair and transportation market.
Marine & Protective Coatings 	1,129	Heavy duty coatings for shipbuilding and repair, building construction and maintenance, aerospace and defense coatings and yacht coatings for large and small pleasure craft.

Table 2.1 Akzo Nobel Coatings Business Units

Akzo Nobel's Market Intelligence & Product Support Group (MIPS) estimated in 2006 that Akzo Nobel is the market leader on the global coatings market (see **figure 2.2**). Their biggest competitor is PPG, headquartered in Pittsburg, Pennsylvania. PPG has 125 manufacturing facilities and equity affiliates in more than 20 countries around the globe and basically operates in the same coatings markets as Akzo Nobel.¹

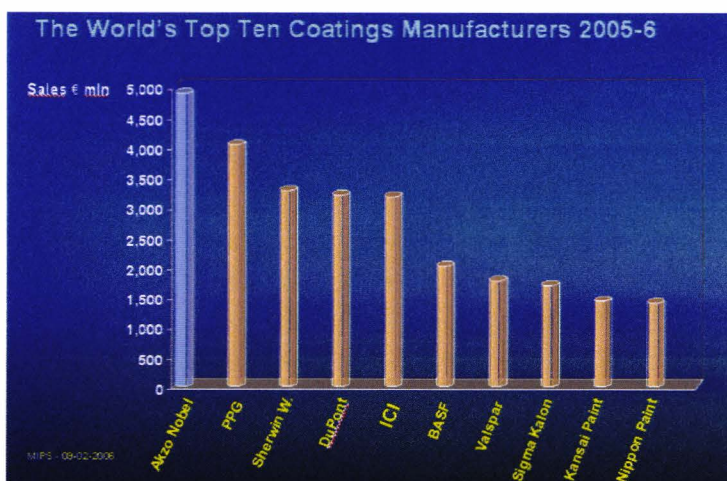


Figure 2.1 Top 10 Coatings Manufacturers²

2. Marine & Protective Coatings BU



The Marine & Protective Coatings BU (2006 sales € 1,129m³) is further divided into regions and sub-Business Units; Marine Coatings, Protective Coatings, Yacht Coatings, and Aerospace Coatings.


Sub BU	Description
Marine Coatings	International Marine Coatings are technology leaders in TBT-free ⁴ antifouling, abrasion resistant coatings, ballast tank coatings and fouling control systems for vessels being built, repaired or maintained. International focuses on three market sectors, Deep Sea, Coastal and Military vessels.
Protective Coatings	International Protective Coatings offer an extensive range of high performance coatings for asset protection across a wide range of industries both offshore and onshore.
Yacht Coatings	International Yacht Coatings, worldwide leaders, with the International, Interlux, Awlgrip and Sikkens brand names, offer coatings with the safest and most powerful antifouling technology and the most advanced systems to protect and beautify yachts from the smallest dinghy to the largest and most luxurious superyacht.
Aerospace Coatings 	Akzo Nobel Aerospace Coatings is a global leader with a worldwide customer base. Serving the commercial, general aviation and military markets with high performance protective coatings, their products are supplied extensively to original equipment manufacturers and the worldwide aircraft maintenance and repair industry. The land defense market is also served by this sBU.

Table 2.2 Marine & Protective Coatings BU

¹ Source: <http://corporateportal.ppg.com/ppg/>

² Source: BU Overview presentation 2007

³ Source: Akzo Nobel Year Report 2006

⁴ TBT: A biocide called 'Tributyltin'

3. Coatings: a growing market

In 2005, the global coatings market was worth US\$ 85.7 billion, or 26.5 billion liters. The market has shown healthy increase in recent years. Between 2001 and 2005, the average annual growth stood at 2.7% in constant value terms, and 4.2% in volume terms. Between 2005 and 2010, the annual growth rate is forecast to accelerate, to 5.4% in constant value terms, and 5.6% in volume terms. Much of the growth over the past five years has been driven by increasing demand in developing markets, especially in Asia (notably China, but also Thailand, Indonesia, India and Taiwan) and Eastern Europe (especially Russia, Hungary and the Baltic States).¹

GLOBAL SALES OF COATINGS 2001-2010

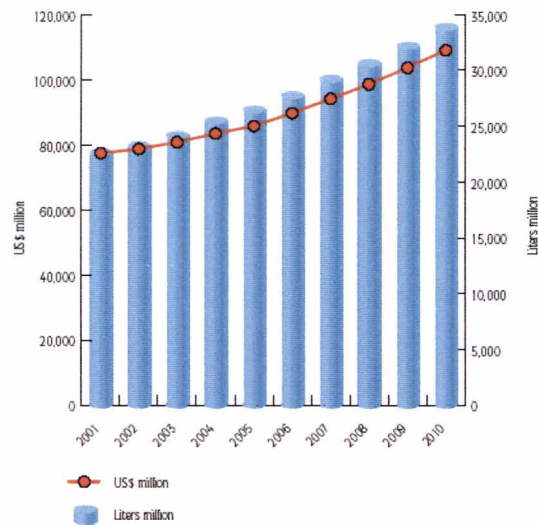


Figure 2.2.1 Global sales of coatings 2001-2010

¹Source: Global Coatings Report 2006

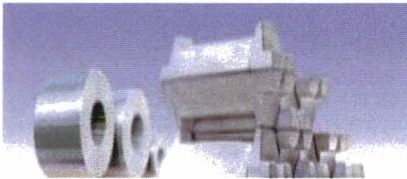
4. ANAC Focus Markets



1. OEM Endline



2. Maintenance



3. Structural



4. Military Air



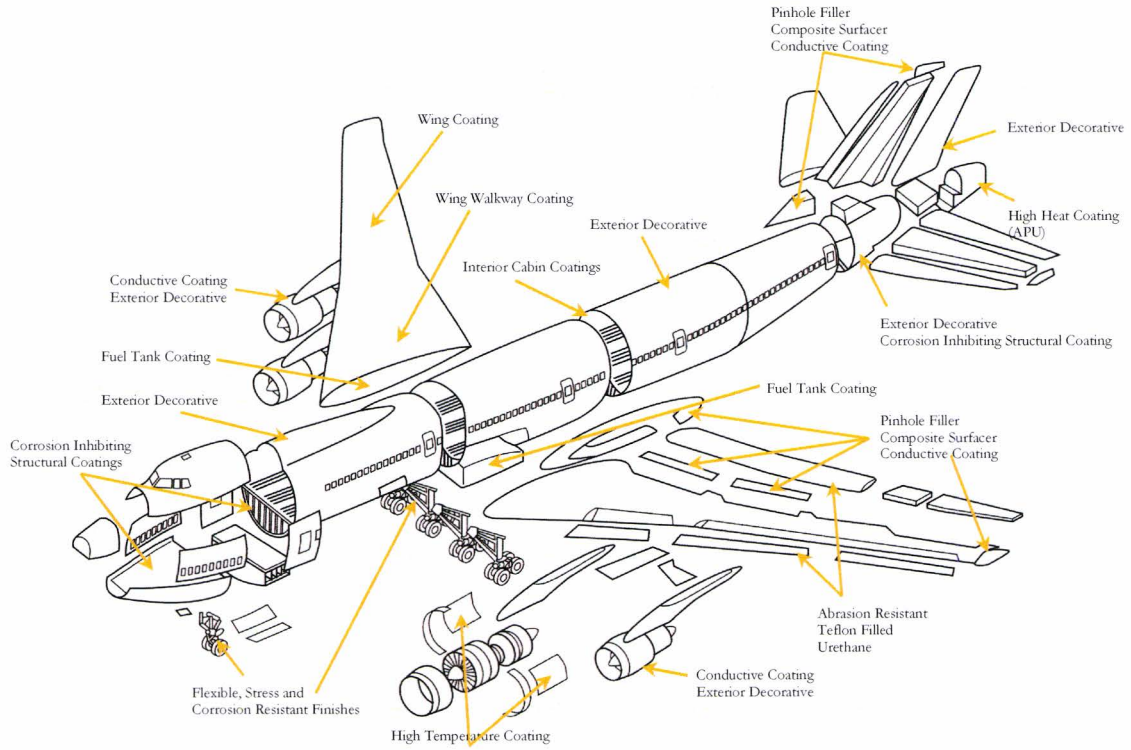
5. Military Land



6. General Aviation

5. Aerospace Coatings Application Chart

The chart below indicates where the coatings application areas of an airplane.



6. Interviewee list

The table below provides the selected interviewees during the project. Next to their function and the contact frequency, topics that were handled in particular (besides the core questions of appendix 7) during these interviews are shown.

Name	Function	Contact Frequency	Topics in particular
T. Boersma	Supervisor + Product Manager Civil	Weekly	Status graduation project
R. Van Kooperen	Supervisor + Manager Product Management	2-Weekly	Status graduation project
L. Warmerdam	Product Manager Defense	4	'Targeting Market Growth'
K. Bodegom	Manager Product Management	Weekly	Management Team meetings
I. Walker	General Manager ANAC EMEA	6	Status graduation project
J. Gerrits	Sales and Commercial Manager	4	Management Team meetings
J. Van der Voorn	Operations Manager	2	
R. Wagtendonk	Logistics Manager	2	Business Improvement Projects
H. Polak	Global Technical Manager	4	Management Team meetings
H. Lovink	Global Finance Manager	2	
H. Van Belle	Technical Consultant Manager	2	
R. Rijnsburger	Area Sales Manager	8	Maintenance Market intelligence generation
R. Bremer	Area Sales Manager	8	Maintenance Market intelligence generation
J. Van der Meer	Area Sales Manager	8	Maintenance Market intelligence generation
H-J. Van Puffelen	Area Sales Manager	8	Maintenance Market intelligence generation
Barreda	Area Sales Manager	2	
Pucini	Area Sales Manager	2	
R. Van Dijk	Quality Manager	8	Business Improvement programs, 'Capturing the Customers' Feedback'
A. Hopkinson	Business Improvement Champion	2	'Capturing the Market' Project
R. Walker	Account Manager Defense	3	'Targeting Market Growth'
W. Boxhoorn	MIPS Business Analyst	1	MIPS Market Analysis
L. Menze	Marketing Services	1	ANAC Marketing Services
H. Koome	Product Manager Color	4	Color Management
S. Schrier	Assistant Controller	2	SAP data

7. Interview Questions

The following core questions were asked during semi-structured interviews with **ANAC** employees:

1. How does ANAC collect market information (responsibility, what information, used tools etc)?
2. How does ANAC share market information?
3. How does ANAC use market information?
4. Regarding these processes, what goes well and what doesn't go well?
5. What do you think are the reasons for this?
6. How do you think this can be improved?
7. Have there been taken actions for improvement in the past? If yes, what were the outcomes? If no, why not?
8. Other issues that come up.