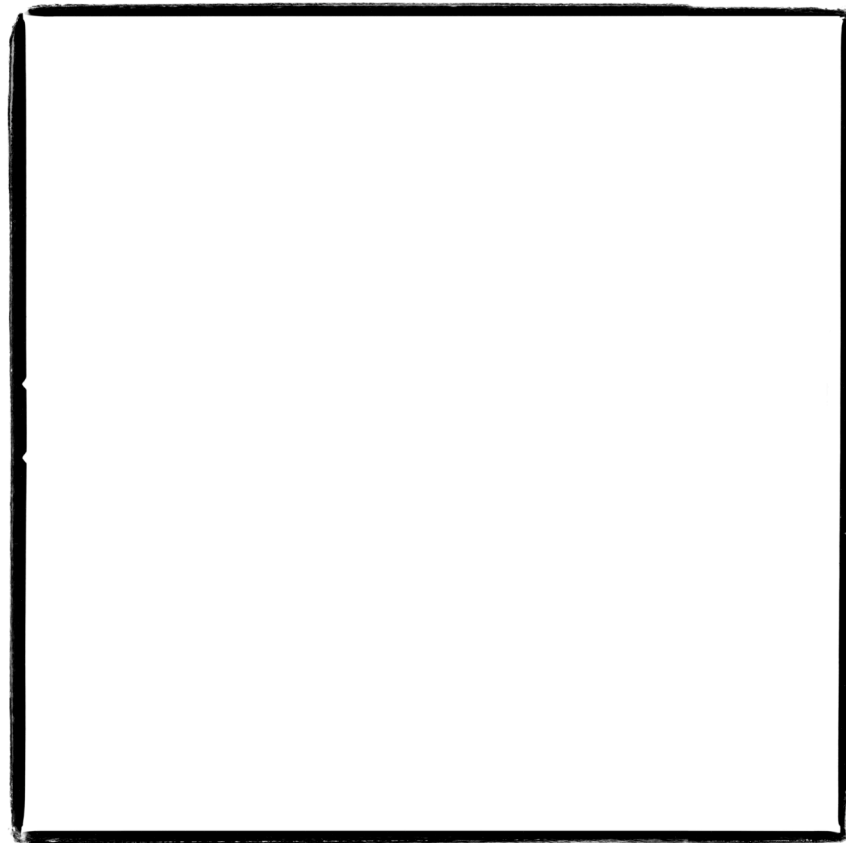


CHALMERS



The Big Picture

Investigating Strategic Capabilities of Design and Product Development

Master of Science Thesis in Industrial Design Engineering

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Division of Design & Human Factors

CHALMERS UNIVERSITY OF TECHNOLOGY

Göteborg, Sweden, 2010

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Cover: Hasselblad's iconic square picture frame. Source: Ranum (2008)

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Abstract

This thesis consists of a theoretical investigation of the strategic capability of product development. In order to illustrate the theoretical notions they are concretized through implementation in a fictional product development case for Hasselblad. The first phase provides a theoretical framework of how product development can be conducted with consideration to strategic goals. Initially the theories discuss methods concerned with evaluating the strategically important preconditions affecting the product development. These methods are structured around Kapferer's brand prism model and concern the company's context, communication and capabilities. Subsequently, the methods go on to express how product development can be managed in order to align concepts with strategic goals.

In the case study the methods are implemented, giving an analysis of the current preconditions that are strategically important for Hasselblad. The analysis showed that there were inconsistencies between Hasselblad's core values and how the values were communicated to the users. It also revealed that one of Hasselblad's most significant strategic resources was their heritage.

Based on the analysis, a set of strategic goals was formulated. A key notion of the goals was to primarily increase the brand awareness among private consumers as this was thought to have a beneficial effect on the professional users. Subsequently a number of concepts were created with influence from various methods aligning the concepts with the strategy. The final concepts, which included both actions and products, focused on creating a stronger brand heritage within the products through referencing design features from Hasselblad's previous product history. Also, the concepts aim to provide improved recognition of the products through instigating an altered way of interacting with the cameras, resulting in a more iconic and recognizable mode of use.

Keywords: Product Development Strategy, Design Strategy, Visual Brand Identity, Portfolio Management, Brand History.

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1. Introduction

1.1 Background

The nomenclature of strategy- and market oriented product development

This chapter aims to give the reader a brief overview and better understanding of the topic addressed. In addition, an explanation of the basic structure of the report will be given.

*What's in a name? That which we call a rose,
by any other name would smell as sweet.
-William Shakespeare 1597*

Simply put, the focal point of this thesis will be the intersection between marketing and product development. Of course with “marketing” being the wider meaning of the word and not just limited to advertising and PR. This specific intersection has been the interest of many researchers, with many different backgrounds and standpoints. Thus, research has given rise to many expressions, models, idioms etc., which sometimes causes confusion regarding this multifaceted topic. Some of the existing expressions and buzzwords include *brand & identity management*, *design strategy*, *design management* and so on. This is the cause of the Shakespeare quote in the beginning of this chapter, the meaning of which is that the same object, or in this case topic, can be explained and viewed in a variety of ways without changing the nature of the object. In line with this philosophy, the notion adopted in this thesis is highly inclusive, acknowledging not only that most of the models are valid, but also that they in many cases describe the same things seen through different lenses and in fact complement each other.

Something that a lot of the research shows (see Ravasi & Lojacono 2005, Karjalainen 2004, Person et al. 2007 and Warell & Nåbo 2001) is that companies are often plagued with inefficient collaboration between the different divisions within the company. This inefficiency is often caused by a lack of understanding between marketing, design and engineering. (Ibid.) Typically, a marketing strategy is devised, formulating *mission*, *vision*, *core values* and *company policies* etc. And so far so good, but often enough, problems arise when it comes to implementing the strategy, particularly when it comes to how to design products so that they communicate the same things as the marketing. (Parrish, 2007)

Another gap that has been identified and often present is the gap between how a company would like to be perceived and how it is *actually* perceived by its customers. (Ravasi & Lojacono, 2005) These gaps and theories on how to close them, so that the identity of the company and the identity of the products become congruent and speak in one voice, will be the main topic of this thesis. It will be referred to as *strategic design*.

The backbone of the report will be the *brand prism* model proposed by Kapferer (see chapter 3.1). The model describes the complex nature of strategic design through the fundamental dimensions of the company's *context*, the *company* itself, the *user* and the *communication* of the company. Hence, these four dimensions will provide the general structure of the report.

1.2 Purpose

The purpose of this master's thesis is to explore and suggest how future products could be developed for the camera company Hasselblad in line with design strategic theories and considerations related to the camera industry.

NB: The thesis was not carried out by official appointment of Hasselblad. The thesis used Hasselblad's products as a case study in order to concretize the notions of the theories, therefore the result does not in any way reflect Hasselblad's actual product development.

1.3 Secondary purposes

A secondary overriding purpose of this thesis is to establish a theoretical framework with theories concerning strategic considerations regarding product development. Additionally, the case should be carried out in such a fashion that it highlights and concretizes the theories being implemented.

1.4 Additional issues of interest

- How can Hasselblad use their product development as a strategic asset?
- Is it possible for Hasselblad to use their past as a competitive advantage against younger competitors?
- What are the benefits of a strong brand identity?
- How can a company communicate their core values through their product design?
- Once the core values and character of a company have been decided, how can the product development be aligned to create a congruent message?

1.5 Delimitations

The product development of a high-end camera is largely dependent on technical innovation, however, the purpose is in this case to focus on the early stages of product development and how to emphasize the intangible qualities of the company. Therefore, technical product investigation will only be conducted to some degree.

In addition, the evaluation will be limited to considering only the product development of cameras i.e. Hasselblad's peripheral equipment, such as scanners and computer software will not be analyzed.

Creation of concepts will be based primarily on the ability of the concept to fulfill strategic product development goals, consequently little consideration will be given to economic requirements.

The purpose of the concepts are to give an indication of how the analysis can be put to use and implemented in product development, the visualization of the concepts will therefore be given an appropriate level of abstraction i.e. they will not feature CAD modeling and closer manufacturing requirements.

2. Workflow

Literature study

The initial action in the creation of this thesis was a vast literature study, the purpose of which was to establish both a relevant theoretical background to the thesis and to propose an appropriate methodology for the case study. The literature study and compilation of appropriate theory was carried out over roughly the first quarter of the project. The compiled results of the literature study are presented in chapter 3, *Theoretical framework*.

An appropriate methodology for the Hasselblad case study was derived from the theories. This chapter contains a synopsis of the theories that were implemented in the case study, the methods are more explicitly described in the theoretical framework chapter. The case methodology consisted of creating an analysis of the strategic product development preconditions. From the analysis of those preconditions a number of strategic goals were formulated. Consequently, concepts aligned with the strategic goals were created. The structure of the methods is derived from the brand prism model (see chapter 3.1)

Five forces analysis

In order to investigate the competitive rivalry in Hasselblad's market, a five forces analysis was conducted. The analysis took into consideration factors such as competitive rivalry from incumbent competitors, prospective competitors, threats from substitute products and bargaining power of suppliers and buyers.

SWOT/PESTEL analysis

Internal and external competitive abilities were evaluated with the use of a SWOT/PESTEL diagram. The diagram provided a list of aspects in the dimensions *strengths*, *weaknesses*, *opportunities* and *threats*. The PESTEL framework provided the analysis with a number of key drivers designed to ensure a comprehensive analysis. The PESTEL drivers are: *political*, *economical*, *social*, *technological*, *environmental* and *legal*.

Internal capabilities analysis

After the external factors influencing the industry had been evaluated, the internal capabilities of Hasselblad were investigated. This included analysis of their mission and vision statements and an evaluation of their current strategic position in regard to the theoretical framework.

Communication analysis

After the company and the context had been analyzed, the focus was how the values of the company were communicated to the user through different channels such as web, product language, portfolio management and other ways that the company makes its voice heard. The analysis of product language was carried out with a *design format analysis* and a *historic design format analysis*. The DFA consisted of a structured comparison of characteristic design features within Hasselblad's product portfolio. The HDFA put the results of the DFA in relation to how the products have evolved over time.

User analysis

In order to investigate how users perceived Hasselblad a number of interviews were carried out. The interviews targeted both retailers of the cameras as well as the end-users. The interviews were carried out as qualitative, semi-structured phone interviews.

Concluding precondition analysis

After the present preconditions had been analyzed, the result was summarized into a conclusive analysis, which would serve as the foundation for the following phase of the thesis; formulating strategic goals and creating concepts aligned with the strategic goals.

Formulation of strategic product development goals

Using the preconditions analysis as foundation, a number of strategic goals were formulated. The purpose of the goals was to ensure that the subsequent concept creation was aligned with the results of the previous analysis.

Personas

In order to efficiently summarize the results of the user analysis in an accessible way, two personas were created. The personas were given different characteristics in order to encompass both the identities of the average customer and a more aspirational user.

Moodboard

To specify the preferred expression of new concepts, a moodboard was created. The greatest influences on the inspiration for the moodboard were the company core values. Also, the moodboard was devised to bridge the gaps that had been found between how the values were originally formulated and the way that they were currently being expressed.

Ideation

Ideas for concepts were created using brainstorming techniques in combination with influences from the moodboard, personas and formulated goals.

Concept evaluation

The concepts were evaluated in a structured way reminiscent of a Pugh matrix, but with the scoring criteria connected to how well the concepts would fulfill the strategic goals.

Case results

The highest ranked concepts were presented with explanations, sketches and accounts for how they connected to the strategic goals.

3. Theoretical framework

3.1 Brand Identity Prism

Recent brand research (Aaker, 1996, Kapferer, 1992 & Prahalad, 2007) suggests that a good way of looking at a company's brand is to view it as having an identity. Kapferer has constructed a model for analyzing this identity, called *the Brand Identity Prism* (see fig. 3.1).

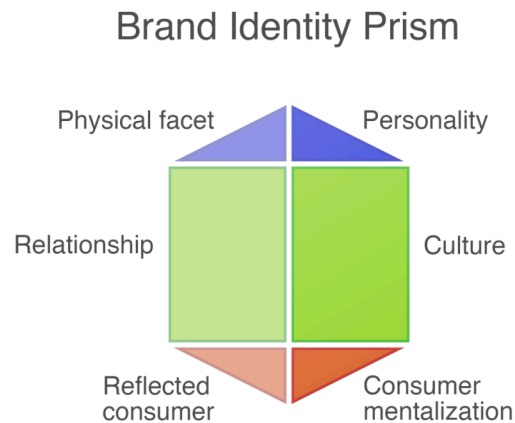


Fig. 3.1. Brand identity prism model. Source: Author's own work, adapted from Prahalad (2007)

According to Prahalad (2007) the model consists of the six "facets" together making up the brand identity prism; The *Physical facet*, *Personality*, *Relationship*, *Culture*, *Reflected consumer* and *Consumer mentalization*.

The physical facet represents what the brand is, what has normally been considered in traditional positioning, the basic value added, or benefit of the brand.

The personality refers to the brand character, which is communicated by the way the company "talks", the character of the voice of the company.

The culture is what is communicated to the consumer about the company's moral values through e.g. corporate social responsibility (CSR) or company policies. A factor that greatly influences the perceived culture is the origin of the company, for example the nationality or history of the company.

The relationship refers to the company behavior when meeting the customer. The character of the relationship is for example manifested through the direct company-consumer interaction connected to a purchase or service situation.

The reflected consumer is a description of the *perceived* customer of the company. Not to be confused with the actual target audience, the reflected consumer is a beneficial conception in the minds of the consumers of whom the products are aimed for (e.g. the Marlboro man, or the Apple young-creative).

The consumer self-image is the understanding within the company of their customer's mentalization or self-image. The self-image is a dynamic set of individual beliefs that the consumer has about him or herself. These beliefs can be hard to chart, but they can be examined by analyzing purchase and consumption patterns. (Prahalad, 2007)

According to Prahalad (2007) the identity of the brand is created in the minds of the consumers as the brand "speaks".

The clever composition of the facets in the model, according to Prahalad (2007), is that the first two, *physical facet* and *personality* are intertwined and determine the sender. Similarly, the last two facets, *reflected consumer* and *consumer mentalization* are intertwined and together define the recipient. The middle two facets, *relationship* and *culture* link together the receiver and the sender.

Apart from the horizontal arrangement of the facets, the vertical division is also of importance. The facets on the left side of the prism are social, visible and helps provide the brand expression, or image. The facets on the right side are abstract and internal and connect to the soul of the brand. Prahalad (2007)

3.2 The context

3.2.1 Porter's five forces

Porter's five forces framework was originally created as a guide to help assess how attractive and profitable a given industry was. But over time, it has also proved a very successful tool to create a strategic foundation for a company or brand. (Johnson et al., 2008)



Fig. 3.2. Five forces model. Source: Provenmodels.com (2010)

Porter's model helps assess the situation for a company based on five aspects; *Potential entrants*, *Substitutes*, *Buyers*, *Suppliers* and *Competitive rivalry*, see fig. 3.2. (Johnson et al., 2008).

Threat of entry

The threat of entry means how easy it is for new competitors to enter the industry. The obstacles preventing new entrants are called *barriers to entry*. High barriers are beneficial for incumbent companies and low barriers are beneficial for competitors looking to enter. The barriers to entry are affected by the following factors; *Scale and experience*; big incumbent companies within the market gives high barriers, as such companies will have learned from experience how to perform tasks efficiently. *Access to supply or distribution channels*; The barriers are also high if the incumbent companies have control over the supply or distribution channels, either by ownership or supplier loyalty. *Expected retaliation*; New entrants may be discouraged by the likelihood of incumbent companies starting a price war or marketing blitz against a new competitor. *Legislation*; Naturally, legislation and government action can affect the height of the barriers. *Differentiation*; Differentiation increases the barriers of entry as it increases customer loyalty. (Johnson et al., 2008)

Threat of substitutes

Substitutes are products or services that offer a similar benefit to the customer, but by different means. Public transport (busses, trams, trains) is for example a substitute of driving. Note that the importance of substitutes is highly dependant on the product and the industry.

The *price/performance ratio* is one of the most important considerations considering the threat of substitutes. (Johnson et al., 2008)

The power of buyers

The power of buyers refers to the bargaining power of the company's buyers. It is important to make a distinction between buyers and ultimate consumers, as manufacturing companies' customers often are the retailers rather than the final users of the products. The power of the buyers is likely to be *high* if; there are few buyers, if the switching costs are low or if there is a risk of buyer competition, meaning the risk of buyers acquiring the competence of the company, making the company's services redundant. (Johnson et al., 2008)

The power of suppliers

The power of the suppliers means the bargaining power of the actors supplying the company with what is required to produce the product or service. The power of the suppliers is likely to be *high* if; there are few suppliers, if the switching costs are high or if there is a threat of supplier competition. Supplier competition means suppliers start producing the same products as their customers. (Johnson et al., 2008)

Competitive rivalry

In addition to the four factors mentioned above, there are a number of important aspects affecting the competitive nature of an industry. The overall competitive rivalry is *increased* where: the competitors are roughly the same size, where the industry growth rate is declining or mature, where there are high fixed costs associated with the industry, where the exit barriers (cost of disinvestment) are high and where there is little differentiation. (Johnson et al., 2008)

3.2.2 SWOT analysis

The SWOT analysis is a tool that helps summarize key issues from the business environment and the strategic capability of a company (Johnson et al. 2008). According to Agndal and Axelsson (2009), it often serves as the foundation for company strategy development. The letters *S*, *W*, *O*, and *T* in the analysis correspond to the analyzed dimensions, which are: *Strengths*, *Weaknesses*, *Opportunities* and *Threats*. (Ibid.) Ideally, the SWOT analysis should be visualized in a grid (see fig 3.3) and be put in comparison with SWOT analyses of the competitors (Johnson et al. 2008). The dimensions Strengths and Weaknesses generally refer to internal capabilities, while Opportunities and Threats are external influences. To facilitate the generation of SWOT factors, a category-based framework such as *PESTEL* can be used (Johnson et al. 2008).

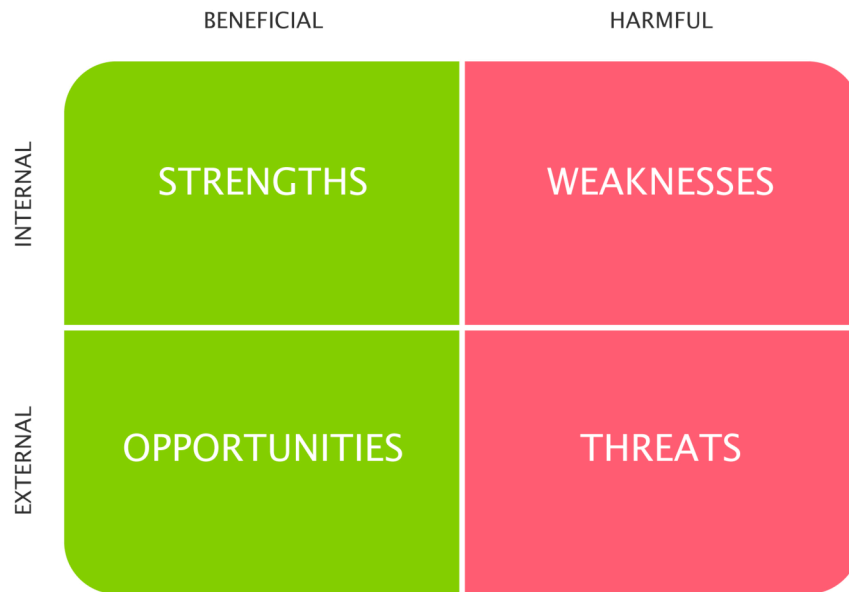


Fig. 3.3. *SWOT model*. Source: Author's own work, adapted from Johnson et al. (2008).

3.2.3 PESTEL

The *PESTEL* framework is used as a checklist-type guideline to identify key drivers and future scenarios that might affect a company's macro-environment. The framework can favorably be combined with other means of analysis such as *SWOT* analysis or *Scenario planning*. (Johnson et al. 2008). The name *PESTEL* is an abbreviation of the dimensions considered in the analysis and stands for: *Political, Economical, Social, Technological, Environmental* and *Legal*.

P E S T E L

Fig. 3.4. *The PESTEL framework*

Each of the dimensions is taken into consideration and the result is a number of key drivers that have a big impact on the company's situation, either presently or in the future. (Johnson et al. 2008). Similar frameworks, fulfilling the same function exist, e.g. David Parrish's *ICEDRIPS* (Parrish, 2007).

3.3 The company

3.3.1 Mission, Vision & Values

A company's mission, vision and value statements are absolutely central in defining how the company's product development will be carried out. Researchers have created rules for what these statements should, and should not, include. The *mission statement* is, according to Parrish (2007), simply a description of what the organization actually does. Johnson et al. (2008) add that the mission statement should provide employees and other stakeholders with clarity about the purpose of the organization.

Closely related to the mission statement is the *vision statement*. The vision statement describes what the organization aspires to be (Parrish, 2007). According to Johnson et al. (2008) the vision statement should be phrased in a way that enthuses, gains commitment and stretches performance. Parrish (2007) describes the vision statement as the company's "promised land" and states that it should appeal to the heart as well as the head.

A widely adopted approach is to define the company's core *values*. According to Parrish (2007) the core values are a set of principles according to which the company will conduct itself on the road to fulfilling the mission and vision statements.

One of the most common critiques of the way companies use mission, vision and value statements is that the statements are too bland and wide ranging. This often means the statements are used more as means of advertising than actually guiding the company's internal efforts. (Johnson et al., 2008). A danger is also imminent if the statements are made public, that they may backfire if the company clearly fails to live up to them in practice. (Ibid.)

3.3.2 Strategic drift

In analyzing established companies a term commonly discussed is *strategic drift*. Johnson et al. (2008) describe strategic drift as the tendency for companies' strategies to fail to keep pace with a changing environment. The phases of strategic drift are portrayed in the figure 3.5.

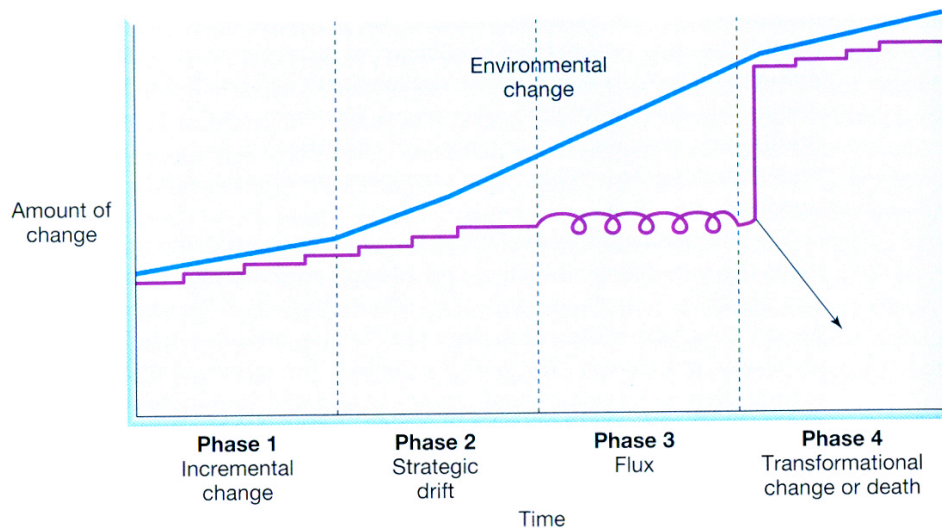


Fig. 3.5. Strategic drift chart. Source: Johnson et al. (2008)

The creators of the model (Johnson et al. 2008) argue that the main reason that strategic drift occurs is due to a natural unwillingness among managers to make significant change to an established strategy, especially if the strategy has proven successful in the past.

The model describes four separate phases of strategic drift:

Phase 1: *Incremental change*: The company makes incremental changes to adapt to changes in the market.

Phase 2: *Strategic drift*: An acceleration in market change occurs and the incremental changes of the company are not enough to keep the company on the right course. Toward the end of the second phase, the drift will likely cause a downturn in financial performance and possibly loss of market share for the company.

Phase 3: *Flux*: Triggered by the downturn in the end of phase two, bad turns to worse as the company often experiences a series of changes for the sake of change, but in no clear direction. These changes are often the results of increased pressure on the company from various stakeholders. Arguments often revolve around whether future strategy should be based on historic capabilities or whether those capabilities are becoming redundant.

Phase 4: *Transformational change or death*: The final phase of the model poses a pair of possible outcomes; either the company dies i.e. goes into receivership or gets taken over by another organization. Or it may go through *transformational change* meaning it will make drastic changes to e.g. products, markets, market focus, change in organization etc. (Johnson et al. 2008)

Johnson et al. (2008) continue to note that transformational changes do not take place frequently in organizations and that they are usually first put into action after a major financial downturn. This could be one of the reasons that if one looks at some of the strongest brands today, many of them have been on the verge of bankruptcy (cf. Apple Computers, Harley-Davidson)

The Icarus paradox

The expression “Icarus paradox” was first coined by Miller (1992). It defines a certain type of strategic drift. It argues that if a company is highly successful in its industry, it will be naturally reluctant to change, even as its environment is evolving. Subsequently, as this development persists, the situation becomes increasingly worse for the company as it strives to replicate what it has done historically, refusing to adapt to its dynamic environment. Miller describes this logical lapse through using the simile of the legend of Icarus. As Icarus succeeded in flying, he flew too close to the sun, causing him to fall to his ultimate demise. Similarly, Miller argues, companies that have had great success also run the risk of becoming trapped by their own triumph and fail because of it. (Miller, 1992)

3.4 The communication

3.4.1 Strategic portfolio management

Concerning strategic management of a company's portfolio, researchers have concluded that one of the most pivotal issues is the balance between familiarity and novelty (Schoormans et al., 2007; Karjalainen & Snelders, 2009; Person et al., 2007; Karjalainen et al., 2007). Of course, when regarding brand positioning, similarity or differentiation usually implies decisions regarding the level of differentiation between different companies' products. In portfolio management however, familiarity and novelty refers to the visual consistency within the brand. The decision whether to implement a high or low level of visual consistency is highly company and context dependant and researchers have tried to create frameworks and guidelines regarding factors that influence portfolio management decisions (Karjalainen et al., 2007)

Karjalainen & Snelders have identified six key drivers influencing the strategy of how companies manage their portfolios (Karjalainen & Snelders 2009);

Lifecycle stage of product category

The lifecycle stage of the product category has a major impact on portfolio management. Note that it does not refer to the life cycle stage of a single product model, but to whether the entire industry category is mature or growing. If the industry is mature, the market will likely be saturated with competitors and the need for brand recognition will be high, suggesting the use of a consistent portfolio with a well established visual identity.

Renewal cycle of product models

The second driver found by Karjalainen and Snelders, the renewal cycle, refers to both the rate at which succeeding product models are introduced *and* to how often a customer makes a purchase. The two are in most cases closely intertwined. When the renewal cycle is long, greater consistency may be beneficial.

Brand position

The brand position is vastly important to portfolio management. The position may range from dominant market leader down to a small, niched company or a price conscious budget alternative. A niched company may benefit from a more consistent portfolio.

Width and structure of portfolio

Highly influential to decisions on portfolio consistency is the number of models on the market at a given time. Karjalainen and Snelders report findings that indicate that if a portfolio is very wide, perhaps as a result of serving many different customer segments, consistency becomes an untenable strategy and a more flexible approach is to recommend.

In a case where the portfolio width is limited, the impact on brand identity by a single product becomes much greater. Every new product becomes a major investment for the company; in fact, each new model can be considered a *lead product*. (Lead products are discussed later in this chapter).

Brand Heritage

Does the brand have a proud history or is it a newcomer? The brand heritage has shown to be one of the most useful foundations for creating brand recognition. Again, this case is most important in mature industries.

Product history

The preferred consistency between current and previous products is also a major consideration. Yet again, the balance between familiarity and novelty is pivotal. A strong consistency with earlier models can provide a strong sense of authenticity and reliability, but too little novelty can be perceived as a lack of innovation and development. (Karjalainen & Snelders, 2009)

In addition to the six drivers identified by Karjalainen and Snelders, researchers have made other insights on factors affecting portfolio management. Monö (1997) highlights that similarity between the products will facilitate comprehension of their function and how to use them. In addition, the notions put forth by Monö are considered by Karjalainen, Person, Schoormans and Snelders (2007). Karjalainen et al. emphasize the importance of two additional considerations; the first one being the design resources available in the company and the second is the communicated value for the consumer.

If the resources available are limited, a plausible strategy can be to implement minor style changes, so called *face-lifts* (with low costs associated) to delay the necessity of major style changes (with higher costs associated) Karjalainen et al. argue that companies with limited design resources style their products more similar to the products of their competitors. (Karjalainen et al., 2007)

The communicated value to the customer refers to how the product is positioned in the minds of the consumers (Karjalainen et al., 2007). Positioning of products near entry-level can be complemented by a highly consistent portfolio to facilitate communication of functionality, while positioning in middle to high end segments can be accompanied by a differentiation strategy, as products are more likely to be perceived as lifestyle accessories (Karjalainen et al., 2007). The authors elaborate by making a distinction between functional- and symbolic positioning. Functional positioning means positioning according to functional benefits such as for example durability. Symbolic positioning means positioning by expressive means such as for example prestige or luxury. It can be noted that a product's positioning virtually always is made up of a combination of both functional and symbolic positioning. (Karjalainen et al., 2007)

Horizontal or Vertical design lines

Recently, researchers have discussed the pros and cons of different types of design *lines* or “families”. Lagers-Dresselhuys et al. (2007) refer to two types of design lines as being *horizontal* or *vertical*, where products in a horizontal line have different functions but a similar design language (e.g. Porsche design kitchen appliances). Whereas products in a vertical line have the same basic function but differ in quality and price (e.g. Braun shaving equipment). (Lagers-Dresselhuys et al., 2007)

According to Lagers-Dresselhuys et al. the benefits of implementing design lines include what is called the *billboard effect*. A billboard effect means that products designed in a similar way, displayed together at the retailer, draw attention as a whole instead of each product on its own. It should be noted that this is highly product and retailer dependant as many retailers

choose to organize their products based on the function rather than the brand. The authors note that there may be exceptions, especially when the brand is associated with high status. (Lagers-Dresselhuys et al., 2007)

Lead products

One way of defining and communicating the brand identity is through the use of so called *lead products* (Karjalainen & Snelders, 2009). A lead product is a product that epitomizes the values of the company (see for example the Fiat 500 or Nokia's 3310). According to Karjalainen and Snelders, consciously designing a lead product means focusing on product features that have more explicit references to the core brand values. The lead product is responsible for shaping the image of the company in the minds of the consumers and subsequently, the lead product can be used as a reference point for new products that will require less design-strategic attention. (Karjalainen & Snelders, 2009)

3.4.2 DFA theory

In order to analyze the visual characteristics and consistency of a group of products (e.g. a portfolio) the method DFA or *Design Format Analysis*, can be used. The method was presented by Warell in 2001 and is described by Karjalainen (2007) and Warell (2006). Both authors stress the value of the method in finding the characteristic visual identity in a group of products.

The first step of the method is to define a number of features found in the products. In many cases this means a certain level of subjective selection, something that might bias the outcome, but according to Karjalainen, the result of the analysis is qualitative rather than quantitative, and the selection can therefore be based on different criteria depending on the purpose of the analysis. Karjalainen also states that if there is access to design features that the company itself defines as the brand identity, those features might be a good starting point. (Karjalainen 2007)

Second, after the features have been defined, the selected products are examined individually to see if they incorporate the features. Warell encourages the result of this examination to be summarized and documented in a structured way, similar to the grid pattern shown in fig. 3.6 (Warell 2006)

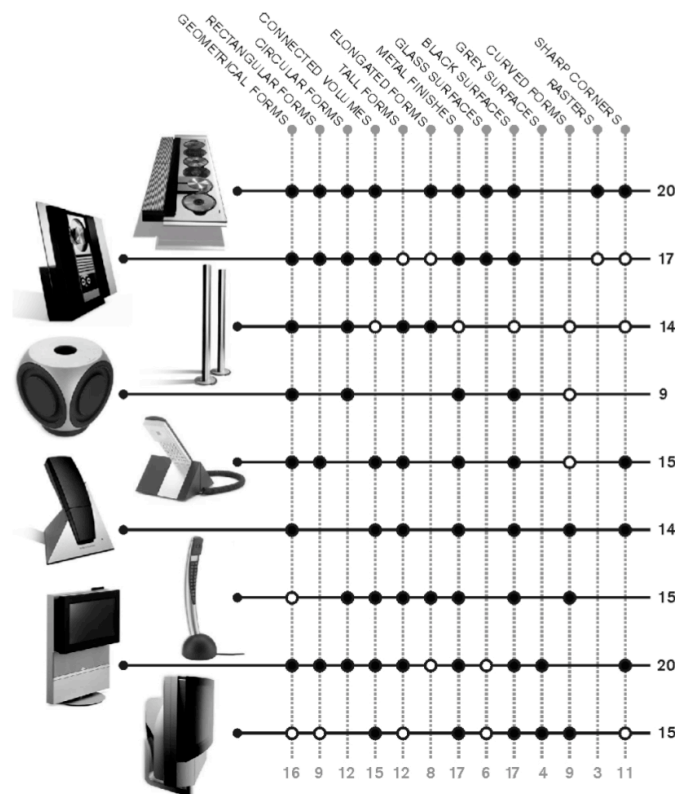


Fig. 3.6. Design Format Analysis example. Source: Warell (2006)

As the figure shows, if a feature has a strong occurrence in a product it is rewarded two points (represented by a filled circle in fig. 3.6.). If the occurrence only is weak, only one point will be rewarded (represented by a circle in fig 3.6.). No occurrence of the feature will subsequently not be rewarded any points. (Karjalainen, 2007)

When the occurrences of all features in all products have been documented, the total score of each feature is summarized vertically and horizontally (see fig 3.6). If the total score of a certain feature is high, it indicates that the feature is significantly important for the visual character of the product group. (Warell, 2006)

Although the method is slightly influenced by the subjective feature selection, Karjalainen states that it can boost insightful discussions if used in a qualitative way. He also states that even though the DFA is a reactive method, the result can favorably be put to proactive use, for instance when planning the strategy of the future portfolio of a brand. (Karjalainen 2007)

3.4.3 HDFA

If the methodology of the design format analysis is implemented on earlier products from a company's portfolio, the result will show what features have been most important to the company's design identity over time. If the results are presented as in fig. 3.7, conclusions can be drawn about when design features have originated and how they have been implemented over time. (Karjalainen 2007) This method will be referred to as HDFA, or *Historical Design Format Analysis*.

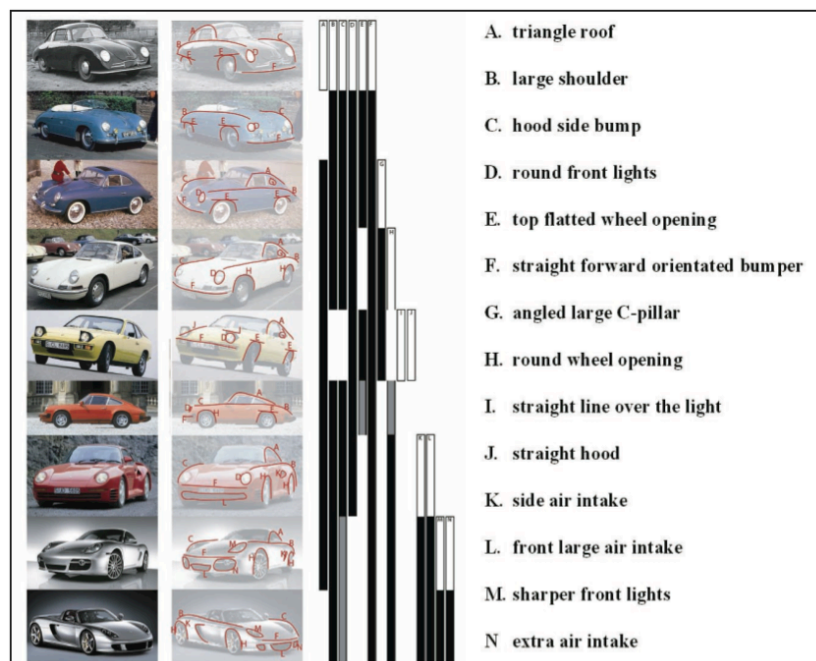


Fig. 3.7. Historical Design Format Analysis example. Source: Karjalainen (2007)

3.4.4 Semantic distortion

Although using tools like the Design format analysis can make discussions and considerations regarding form more tangible, there is still a great risk that a designer's intent to some extent will be misinterpreted by the user. This is portrayed in a model by Karjalainen (2007) (see fig. 3.8)

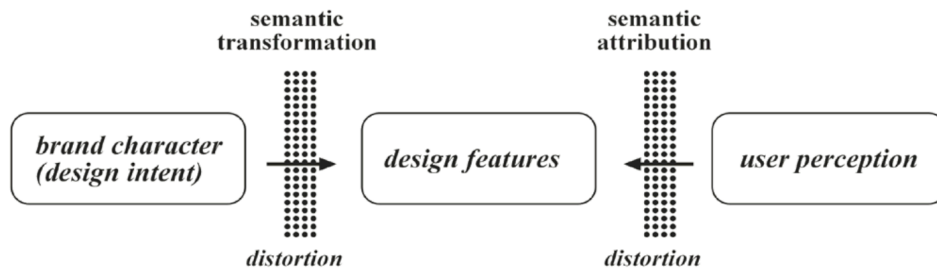


Fig. 3.8. Semantic distortion model. Source: Karjalainen (2007)

According to Karjalainen's model, the misinterpretation is most likely caused by what he describes as distortion in either the *semantic transformation* or in the *semantic attribution*. Semantic transformation distortions are described as a result of the designer's failure to encode the proper values into the features of the product. Semantic attribution distortion, on the other hand, is the user's failure to decode the proper meaning of the design. Karjalainen states that distortions in semantic transformation, or encoding, can be the result of unclear brand values, ill-defined design briefs, or limited knowledge of semantic transformation. Distortion in the semantic attribution can be a consequence of, among other things, a user's inexperience of the particular product category, inconsistent supporting information or differences in social or cultural contexts. (Karjalainen, 2007)

3.5 The user

According to Kapferer's brand prism, one of the most important aspects to consider in devising a strategy is the interplay between the brand and the user. This chapter will deal with understanding the user, how the user connects to the brand, concepts such as *consumer self-image* and *reflected user* and methods of extracting and defining the user's needs.

Reiterating Kapferer's theories on the user in the brand prism, throughout the analysis of the user it is of major importance to make a distinction between the *actual* user, the consumer of the product, and the *reflected* user, the user that the company wants the customers to perceive as the user (e.g. the Marlboro man).

3.5.1 Understanding the user

Jordan (2002b) makes a point of *understanding* the user rather than asking the user what to do. This has been an old truth in product development, in fact, Henry Ford once stated that: "If I had asked people what they wanted, they would have said a faster horse" (businessweek.com 2005). This quote quite essentially epitomizes that in order for product development to be successful, the research should be geared towards creating an understanding for the difference between what the user wants and what they say they want.

In line with trying to better understand the customer, Jordan (2002b) suggests that an effort should be made to not just research the customer through demographics and socio-economic categorization of the target group. He suggests that empathy for the customers should be developed and that they should be understood as people rather than statistics. In order to create a more vivid image of the user, Jordan recommends using *personas*, a kind of user representation used in order to ‘humanize’ the consumer. (Ibid.)

3.5.2 Personas

A persona is a method of creating a fictional character profile to use as a guiding tool in subsequent product development. The profile is used in order to specify for whom the product is intended as well as providing a basis for establishing consumer needs. It should be noted that, according to Jordan (2002b) personas should not be used as a substitute of target group statistics and traditional market research, but rather as a supplement to it. Instead of defining a typical customer as being 29-49 years old and having 2.5 children, a profile is created of a fictional user. The profile of the fictional user should deliberately be made more colorful than the target group statistics, giving the user a name, occupation, perhaps information regarding relationship status, but most importantly, a description of their values, behavior and personalities. (Jordan 2002b)

Although the first impulse may be to create a profile that is as close to the average target customer as possible, this may not always be the best way of doing it. According to Jordan (2002b) even though using a persona that is close to the stereotypical view of the target group can be beneficial, multiple personas could be used for the same project, with some of the personas representing extremes in customer needs. This could for example be a child, a senior citizen or someone visually impaired. The notion is that if the needs of the extreme personas are met, then this will result in an inclusive design that exceeds the needs of the other personas. (Jordan 2002b)

Connecting Jordan’s theories with Kapferer’s brand prism, conclusions can be made about how personas can be made to correspond not only to the actual user of the product, but also to the *reflected* user. If a persona is created to match the reflected user, i.e. the user that the company wants the customer to think is the user, then that may prove very beneficial in order to create a product that fits a lifestyle that the target group will aspire to reach. (Jordan 2002b).

3.5.3 Interview techniques

In order to create a good understanding for the user of a product, it is of great importance to know how to elicit user needs properly. According to de Bont (1992), an interview could beneficially be observed as consisting of the dimensions *interview method*, *participant/interviewee*, *context* and *stimuli*. De Bont continues to state that the method should be optimized with regards to the kind of information that is wanted. This connects to what Preece et al. (2002) calls the *qualitative vs. quantitative* dimensions. Preece states that an important consideration is whether to opt for deeper interviews with more elaborate questions (maximizing the qualitative dimension) or to whether to select more interviewees and less demanding questions (maximizing the quantitative dimension). For quantitative results, a questionnaire is a fitting method. If one chooses to maximize the qualitative dimension, a deeper interview is to prefer. (Preece et al., 2002)

The second dimension, participant, is naturally of great importance and different factors should influence the decision. According to Jordan (2002a) an acknowledged method is to take into consideration the demands of a so-called *critical user*. This method implies that if the demands of the most critical users of a product are fulfilled, then the demands of less critical users will automatically be surpassed. (Jordan, 2002a) In addition to Jordan's thoughts, Preece also adds that in many cases, it is preferable to consult product specialists or professional users of the product. (Preece et al., 2002)

The third dimension, context, is according to de Bont (1992) the decision of where to conduct the interview. He continues to add that research shows that the environment the interviewee is in at the time of the interview has a large impact on the information elicited. In a situation where more thorough answers are preferred, a face-to-face context and inspiring context is recommended. (de Bont, 1992)

According to de Bont (1992), the dimension stimuli concerns how the product or situation the product is used in is represented. Such representation can be anything from a mock-up, a working prototype or pictures to a written use-case. (de Bont, 1992)

In the case where an ordinary interview is used, an important consideration is the structure of the questions. According to Griffin & Hausser (1991) the foundation for the questions should be *Who* is the customer? *What* is the purpose of the product? *When* will the product be used? *How* is the product used? And *Why* is this particular product used? In addition the questions should be structured in a way so that the interviewee is as comfortable as possible, meaning the interview should start with the simple questions and proceed to the value-based questions. (Griffin & Hausser, 1991)

4. Case: Hasselblad

4.1 Introduction to Hasselblad



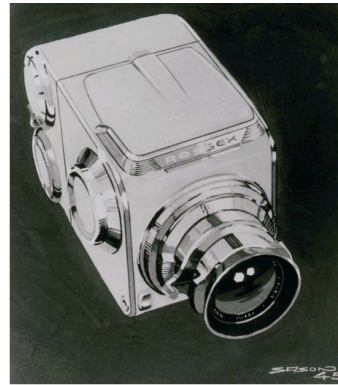
*Fig 4.1. Hasselblad 1600F, one of Hasselblad's earliest camera models.
Source: Ilchenko (2007).*

Hasselblad is a prestige camera manufacturing company that was founded in Sweden as early as 1841. Fig. 4.1. shows the Hasselblad 1600F, one of Hasselblad's earliest camera models. Today Hasselblad serve only the extremely high-end segment of the market with a vast majority of their customers being professional users. Hasselblad has traditionally been one of the most highly regarded camera manufacturers in the world and experienced a golden age during the second half of the 20th century. During this period they relied on manufacturing traditional film cameras but with the introduction of digital cameras, Hasselblad experienced a major financial downturn. Today they struggle to restore their once proud brand name.

Although the company Hasselblad was born in 1841, it was traditionally founded as a trading company and did not produce their first camera for civilian use until a century later. At the time of the Second World War Hasselblad were manufacturing watches as the founder's son, who was interested in photography, was approached with a request to build an aerial camera for the Swedish Air force. The son, whose name was Victor, fulfilled the request and continued to manufacture a number of camera models for military use. After the war, Victor's father passed away and Victor took over the family business and started developing a hand-held camera for civilian use. In order to come up with a design for the camera, he arranged a design competition. The winner of the design competition was the renowned Swedish industrial designer Sixten Sason, most famous for designing the iconic original Saab 92 (fig. 4.2).

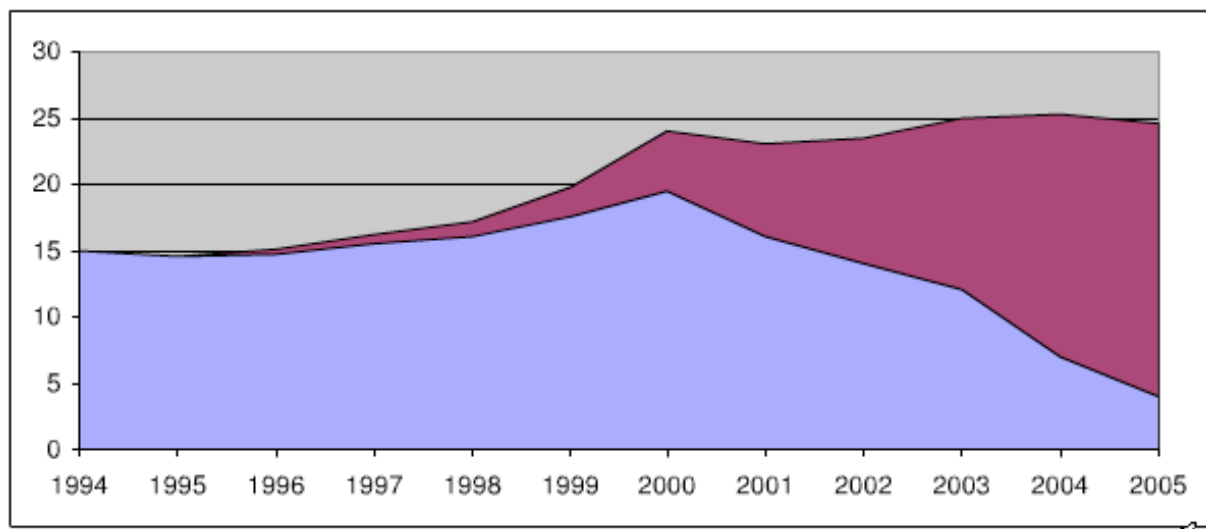


*Fig. 4.2. Sason's original Saab 92 concept.
Source: automotorblog (2010).*



*Fig. 4.3. Sason's Hasselblad concept
Source: Hasselblad (2010a)*

During the 50's the company continued to grow slowly and in 1962 a collaboration with NASA was initiated. By the time of the first lunar landing, the Hasselblad cameras rose to fame as the camera that captured the picture of the first man on the moon. During the 70's and 80's Hasselblad continued to reinforce their position as the world's number one manufacturer of high-end cameras, but by the end of the century digital photo technology was introduced. Over the next decade, Hasselblad suffered, as sales of traditional cameras plummeted and sales of digital cameras rocketed.



*Fig. 4.4. Sales volume of cameras in the US, Digital (purple) vs. Film (Blue).
Source: Sandström (2008)*

Although Hasselblad were initially at the cutting edge of digital technology, they suffered from a turbulent time of ownership acquisition and unfortunate management that chose to discontinue the development of digital technology. As a result Hasselblad have suffered a major financial downturn and were left trailing in the development of digital photography. Today Hasselblad are trying to restore their once proud name and recapture their standing as being unparalleled in quality and prestige.



Fig. 4.5. Hasselblad H3D, one of the latest models. Source: Sides (2008)

(Sources: hasselblad.com, hasselbladhistorical.org, Sandström (2008) and user interviews)

4.2 The context

4.2.1 Five Forces

The five forces framework was originally developed as a methodology through which the attractiveness of a specific industry could be estimated. Although it is not its original purpose, the framework can be used in order to give a solid foundation for strategic analysis. The framework proposes analysis of the market/industry through the following dimensions: *Threat of entry* – The estimated threat of future competitors. *Threat of substitutes* – The influence of products or services that offer a similar benefit for the customer but by a different process. *Power of buyers* - The bargaining power of the company's customers (not necessarily the end-user). *Power of suppliers* – The bargaining power of the suppliers, where the supplies can range from raw material to labor. And finally *competitive rivalry* - The rivalry from companies with similar products aimed at the same customer group.

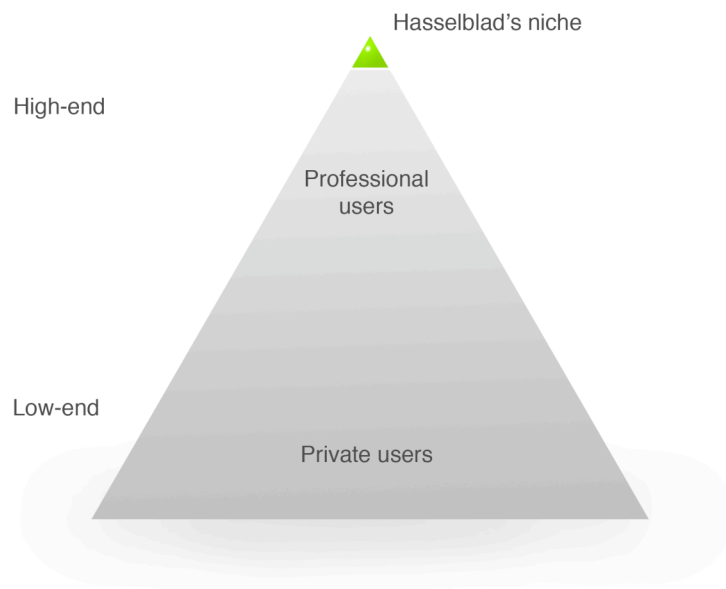


Fig. 4.5. Hasselblad's competitive niche. Source: Author's own work

Threat of entry

Scale and experience

Hasselblad's competitive niche is highly mature technically, there are established major competitors and the professional experience of the competitors is vast. In order for a new competitor to be successful in the same niche, substantial investments would have to be made. These are all factors that provide *high* barriers of entry.

Access to supply or distribution channels

Hasselblad has got a well-established relationship with existing retailers. However, they do not own the dealerships so they have no direct control over them. Additionally, Internet sales in the photography industry are increasing and one of the leading photography retailers globally is internet-based. If the interactive photography retailers continue to increase their

sales at the expense of traditional retailers to the point where the traditional ones will go out of business, this could pose a threat to Hasselblad, as their control over the distribution channel would decrease.

Expected retaliation

Another deterring factor for a company looking to enter a new market is the likelihood of incumbent companies starting a prize war or marketing blitz in order to outmaneuver the new company. With dominant established companies in the camera industry, such retaliation is to be expected.

Legislation or government action

In several industries the strength of patent protections is enough to put off a prospect company. The technical maturity of the camera industry ought to imply that patent protection should be strong, however the large number of competitors in the industry suggest that the patents can be successfully evaded.

Differentiation

If a market is highly differentiated, this is also a factor that makes it look less attractive to new companies. High differentiation is likely to occur in high-end, mature and saturated markets, all true for the market Hasselblad is active in. High differentiation provides the customer with a higher perceived value of the product, making it harder for new companies to compete successfully due to higher customer loyalty.

Threat of substitutes

The threat of substitutes is a very interesting aspect in Hasselblad's case as the matter of what is a substitute is highly dependant on how you define the benefit of a Hasselblad camera. If you simply define it as a tool that gives the user the most exact depiction of what is in front of it, then the only plausible substitute would be a different camera, possibly so different in quality and scope that it is not considered a regular competitor. However, if we define the benefit of a Hasselblad camera as being something more than just technical, perhaps the benefit of fulfilling a dream, or the satisfaction of acquiring a rare high-end commodity that says something about the user, then substitutes could be a motorcycle, a watch or a sailboat. It could be noted that the matter of what a substitute is could be depending on who you define as the customer, as the latter example most likely is true for a private user and the first for a professional photographer. But this in turn raises the question "Aren't photographers people too?" Stompff (2003), a designer for a company that manufactures "document reproduction equipment" –copiers for professional use, highlights the fact that even in strictly professional cases where, theoretically, the only interesting aspect of a product should be the technical function, the emotional qualities of product design is also highly important. This is because people, even professionals, are not completely rational and will often make assumptions regarding the functionality of a product based on the emotional values communicated through the design. Stompff (2003)

Power of buyers

According to Johnson et al. (2008) the bargaining power of the buyers is high if; *the buyers are concentrated*, *the switching costs are low* and there is *low threat for buyer competition*.

Hasselblad's customers are concentrated, that is, since they are made up of retailers rather than end-users, they consist of a rather limited number of actors. Note however, that the demand still is decided by the end-user.

The switching costs of the industry are not low. The highly differentiated market indicates that there are high "costs" involved in switching. These "costs" are not always purely economical, but may consist of lock-in effects as results of the users growing used to the interface and how to handle the cameras of a specific brand.

Buyer competition threat, meaning the threat of customers engaging *backward vertical integration* - acquiring the preceding step in the value chain and thereby making their suppliers redundant, is not considered likely in this case, as a result of the product being highly technical. The only scenario plausible is that a retailer could develop an affiliation with another camera manufacturer, giving a higher profit margin at the expense of the Hasselblad affiliation (cf. the resemblance in the grocery industry where retailers start offering groceries under their own brand at a lower price).

Power of suppliers

The bargaining power of the suppliers is likely to be high if; *the suppliers are concentrated, the switching cost is high*, and there is a *high threat of supplier competition*.

The suppliers in the camera industry are considered very concentrated. While some suppliers could rather easily be replaced, the cameras include many highly advanced components; optics etc., that only a very limited amount of suppliers can produce.

The cost associated to switching suppliers is quite likely rather high, as a result of lock-ins due to a large amount of know-how and product understanding from the current suppliers and a high degree of specialization to fit Hasselblad's production.

Supplier competition threat, or *forward vertical integration* e.g. Zeiss starting to produce cameras on their own is not considered a big threat. The smaller suppliers do not have the capacity to start producing advanced products like a camera. Suppliers of major components, for example optics, could theoretically make an attempt at manufacturing entire cameras. In fact, historically Zeiss have made attempts at making cameras under their own brand. The likelihood of this occurring today is however low, as this would cause retaliation measures and impair relations with their current customers, the camera manufacturers.

Competitive rivalry

The previous four forces all affect the last and most central one, *competitive rivalry*. Competitive rivalry addresses issues connected to e.g. the number of competitors and the balance between them. Needless to say, the higher the rivalry, the worse it is for incumbent companies.

A mistake that one easily can make is to define rivals as "companies producing cameras". Rivals are in fact; companies that offer similar products aimed at the same customer group. An entry-level camera is, due to quality differences and customer profile, not a similar product, nor is it aimed at the same customer group. Therefore, the number of rivals is lower than it might appear at first.

Industry growth rate

The competitive rivalry is closely connected to the industry life cycle. Early in the life of an industry, there are enough customers for all companies to allow them to grow with the market. When the market has matured, as is the case with Hasselblad, growth for one company must be at the expense of another. Naturally, this increases the competitive rivalry. A difficult issue however, is whether to address digital photography as the latest development in a mature industry, or to view it as the start of a new one.

Competitor balance

Financially the balance between Hasselblad and their competitors is uneven, reducing the risk of rivalry. This offset is countered by focusing on a smaller niche in order to stay profitable. The curse of this strategy though, is that the moment they start getting too successful, they would draw the attention of bigger competitors and the rivalry is increased.

Other factors increasing the rivalry in the industry is the *high fixed costs* and the *high exit barriers*, especially considering the life cycle of the industry, which implies that other companies would not be interested in acquiring the technology in the case of an exit. The most feasible exit strategy for Hasselblad is to reinforce their brand differentiation in order for it to be attractive for competitors to procure (c.f. other brands like Hagström guitars).

This aspect in combination with the fact that low differentiation and switching costs increase rivalry, gives Hasselblad a strong cause of further increasing differentiation from their competitors.

4.2.2 SWOT/PESTEL analysis

In order to map the key issues and strategic capabilities of Hasselblad, a SWOT analysis was performed. In accordance with the theories discussed earlier, the PESTEL framework was used in order to generate appropriate drivers. In fig 4.6 the result of the analysis is visualized. Each driver is categorized according to which factor(s) in the PESTEL framework it is mainly associated with. (P=Political, Ec=Economical, S=Social, T=Technological, En=Environmental, L=Legal).



Fig. 4.6. SWOT analysis. Source: Author's own work.

Strengths

- *Well-established brand identity (Ec)*. Hasselblad does have a unique base for brand identity, associated with a rich and proud company history and high quality. This is an apparent strength as it is very hard for competitors to imitate or replicate that kind of brand authenticity. Brands are often associated to their nationality and as Hasselblad's main competitors are Asian, the European origin can be seen as a unique strength.
- *Niche offer (-)*. Hasselblad focuses on a very distinct high-end customer segment. This is a clear advantage, as they are able to closely define the needs and demands of their customers.

Weaknesses

- *Limited revenue (Ec)*. Compared to competitors, Hasselblad's lesser revenue means they would be vulnerable to economics of scale, as well as not being able to put aside as big of a budget for R&D.
- *Niche offer (-)*. The narrow customer segment can also be seen as a weakness. A company focusing on a small niche will only keep the niche to themselves as long as they don't become too successful. If or when a niche company becomes too successful, they will draw the attention of their bigger more dominant competitors.

Opportunities

- *Increased social networking (S+T)*. Recent trends show a boom in online social networking sites and discussion forums. As a relatively small actor, Hasselblad can try to harness this as an opportunity to reach out to a bigger audience.
- *Environmental restrictions (P+L)*. Environmental regulations should be the concern of *any* company in planning future product development. For Hasselblad in particular, successful environmental measures could prove to be an important competitive capability, as a smaller organization should be more agile and prone to change compared to juggernaut competitors.

Threats

- *Availability (T)*. As the technology of digital photography develops, better and better technology is becoming available at a lower price. Although a bigger market, with more customers interested in photography may be seen as an opportunity, the possibility to compete on technological specifications alone will become increasingly difficult.
- *E-sales (T)*. Traditionally, Hasselblad has relied on established partnerships with physical retail stores. As e-commerce expands, there is a threat of losing control over the retail channel. If the physical retailers succumb to their virtual counterparts, Hasselblad will have lost their time-honored relations with their retailers and will have less influence on how their products are being presented and sold. Consumers might also be hesitant to purchase expensive products online, something that may benefit Hasselblad's more inexpensive competitors.

4.2.3 The Context: Summarized analysis

The Five forces analysis concluded that:

- The *Threat of entry* is low
- The *Threat of substitutes* is relatively high
- The *Power of buyers* is relatively high
- The *Power of suppliers* is high
- The *Competitive rivalry* is high

The threat of entry is low due to the high entrance barriers of the mature industry; the incumbent competitors have established manufacturing capabilities, distribution channels and customer loyalty. The argument could be made that the rise of digital photography could be viewed as the beginning of a new industry, *but* it is dominated by established actors giving it the characteristics of a mature industry, where competition is fierce and large investments have to be made in order to establish a new competitor.

The threat of substitutes is relatively high due to the high tangible price/performance ratio. Professional users risk substitution to a camera of poorer quality, deeming it to be 'good enough'. To private users a high-end camera can be viewed as a substitute to self-fulfilment purchases such as e.g. a motorcycle, a watch or a trip. The presence of Hasselblad cameras as this type of objects is presently considered quite low.

The power of buyers is considered relatively high due to the low number of customers and the fact that the camera is a non-trivial purchase. The buyer power is lowered by high switching costs and differentiation between competitors.

The power of suppliers is high due to the extremely low number of suppliers that can deliver components of sufficient quality. There are high switching costs and lock-ins involved in switching suppliers.

The competitive rivalry is consequently high, due to the maturity and stagnant industry growth. This is an indication that differentiation from competitors is a good means of competition.

The SWOT/PESTEL analysis identified a number of key drivers and critical factors:

Strengths:

- Well-established brand identity
- Niche offer

Weaknesses

- Limited revenue
- Niche offer

Opportunities

- Social networking
- Environmental restrictions

Threats

- Availability
- E-sales

The analysis shows that an important factor is how to manage Hasselblad's niche offer. The small niche is a strength in the sense that it allows Hasselblad to closely define the needs and demands of their customers. It is also a way to differentiate in a mature industry. It can however also be considered a weakness due to the fact that if the niche starts to become too profitable, it will draw the attention of bigger competitors not currently focusing on the niche.

One of the biggest strengths was considered to be the well-established brand identity. The rich history of the company and sense of authenticity is impossible to imitate for competitors and can be used as a unique strength.

4.3 The company

4.3.1 Mission & Vision analysis

According to Parrish (2007) the core of a company, the basis from which every action originates, should be defined by the company's mission and vision statements and values. This chapter analyses the quality and suitability of Hasselblad's statements.

The most recent interpretations of Hasselblad's mission and vision statements were defined by the advertisement agency Buddy. (Buddy, 2010) According to the agency, Hasselblad's core values are:

Quality, referring mainly to superior image quality.

Performance, vowing to provide performance superior to all competitors.

Versatility, prompting the wide range of application areas that the products provide.

Pleasure of handling, specifically emphasizing equipment being lightweight and meeting the highest ergonomic standards.

The mission and vision statements are epitomized in the *brand promise* "To help photographers achieve their photographic potential". This promise is elaborated by promising superior image quality to the professionally minded, through experience, manufacturing quality and innovative technology. (Buddy, 2010)

In accordance with Parrish's theories on appropriate value statements (Parrish, 2007), Hasselblad's brand promise does appeal to both the heart and the head. Something that could however be questioned is the choice of value words. According to Johnson et al (2008) one of the most common mistakes is to use values that are too bland and wide ranging. This could be true in the current case. The values quality, performance, versatility and pleasure of handling are not exactly unique, and could apply to virtually any manufacturing company and especially to any of the competitors. All of the statements lack substance unless they are put in relation to something else. The first value is *quality*. The highly general claim of quality is narrowed down by specifying it as superior image quality. A central inquiry to this argument is whether or not the quality of a good photo is actually more dependent on other factors than the resolution and image quality. One might argue that e.g. composition or motif is even more important. The second value, performance, might also add confusion to the equation, as the perception of performance is subjective and different to each individual photographer. Performance could for example be anything from 'maximum exposures per second' to more abstract features such as 'Ability to make the user appear professional'. The third value, and perhaps the most unique; *versatility*, could actually provide good guidance for internal choices in product development. The claim means the products must either be designed in a way that suits a multitude of environments, or provide the possibility for them to be altered in order to do so. Lastly, *pleasure of handling* could be considered an obvious consideration in any consumer product development. The statement promises lightweight equipment that meets the highest ergonomic standards. A danger in this statement is the assumption that lightweight will automatically entail pleasure of handling. For a high-end product, ergonomic standards are important to fulfill but in addition, pleasure of handling depends on other factors as well.

4.3.2 Strategic drift

Upon investigation, certain indications can be found implying that the notion of *strategic drift* appears to fit Hasselblad's situation very well. According to the model put forth by Johnson et al. (2008), the first phase of strategic drift is characterized by a time of implementing incremental changes to keep up with a changing environment. This correlates to Hasselblad's period of making traditional cameras (as opposed to *digital*). At that time, smaller changes were being made to fit the needs of the customers as well as changes due to moderate technical improvements.

According to Johnson et al. (2008) the second phase, *strategic drift* is characterized by an acceleration in market change, rendering smaller changes insufficient for the company to keep up with its environment. Towards the end of the phase there is a financial downturn. (Johnson et al. 2008) In Hasselblad's case, the acceleration in market change was without doubt brought about by the introduction of digital photography. Although a common viewpoint is that Hasselblad were too slow in latching on to this technology, this is an erroneous assumption as Hasselblad actually represented cutting edge technology at the forefront of digital photography at the time of its birth. However, strategic slips were made as they chose to discontinue the development and focus on traditional photography. Consequently they have felt the financial downturn described by Johnson et al.

The dynamics indicate that Hasselblad is now in the state of flux, the third phase of the model. Following the financial downturn, ties to the company's past are being severed as radical change is being made, seemingly for the sake of change. According to the authors, the remedy for this is transformational change, however with careful consideration to balancing novelty with the past. Fortunately for Hasselblad, the authors also proclaim that a major financial downturn also can serve as a catalyst for change, as it forces the company to realize that in order to get back on track, they have to dare to make big changes (see for example the cases of Apple or Harley-Davidson).

In addition, Hasselblad's situation seems to be highly reminiscent of the *Icarus Paradox*. (Miller 1992) Hasselblad certainly have had a glorious history of success and the current situation of flux could be explained as being a result of a reluctance to let go of what has historically proven to be a highly successful strategy, with Hasselblad therefore suffering as a result of their success. In fact, a question that could be posed is whether Hasselblad would have the same difficulties, had they not been as successful in the past.

4.3.3 The Company: Summarized analysis

Summarizing the analysis of the mission and vision statements, Hasselblad's brand promise fulfils the theoretical requirements well as it appeals to both the heart and head. The value words *quality*, *performance*, *versatility* and *pleasure of handling* however, were perceived as having the cardinal flaw of being too bland and wide ranging. The most useful word was *versatile* as it provides suitable guidance to the product development.

There are indications that Hasselblad is suffering *strategic drift*. In accordance with the theory, Hasselblad has experienced a period of incremental changes adapting to customer's needs, followed by a period of accelerated market change. This change resulted in a financial downturn which forced Hasselblad into a flux, trying to find its way back to a strategy that is congruent with the market needs. The simile of the *Icarus Paradox* seems apt, as Hasselblad may very well be suffering as a result of the company's past success.

4.4 The communication

4.4.1 Strategic portfolio management

According to Schoormans et al. (2007), Karjalainen & Snelders, (2009), Person et al. (2007) and Karjalainen et al. (2007), the most pivotal consideration regarding how to manage the product portfolio is how to balance visual consistency and novelty. The pitfalls, according to the authors, are the dangers that if the portfolio is too consistent, too visually similar, it could be perceived as lacking in innovation. If on the other hand the portfolio is too visually diverse, it could negatively affect the brand recognition as well as perception of reliability. (Karjalainen & Snelders, 2009)

In order to decide whether it would be a good idea in Hasselblad's case to implement a high or low visual consistency over the portfolio, Karjalainen and Snelders' six key drivers will be used. (Karjalainen & Snelders, 2009)

The mature *lifecycle stage* of the product category indicates, according to Karjalainen & Snelders, that a preferable portfolio strategy would be to be visually highly consistent. This is because the market is saturated with competitors and therefore the need for brand recognition is higher.

The renewal cycle of the cameras, meaning how often a new model is launched, is tightly intertwined with the frequency of a customer purchase. According to Karjalainen et al. (2007), if the renewal cycle is long, there is a need of portfolio consistency to create brand recognition. Primarily, the cutting edge technology means that development of a new camera model is quite costly. Secondly, purchasing new camera equipment is a non-trivial, large investment purchase, this results in a low purchasing frequency, which in turn gives Hasselblad an extremely long renewal cycle, an incentive for portfolio consistency.

Since the cost of creating an entirely new model is very high. Hasselblad are likely to benefit from using so called face-lifts, restyling the products with maintained functionality in order to maintain a sense of innovation.

Hasselblad's current brand position is also an incentive for portfolio consistency, as they are a niched company serving a narrow customer segment. The well-defined user demands means that the portfolio does not have to serve many different users.

The width and structure of Hasselblad's current portfolio is as mentioned extremely narrow. For a company with a broader target audience, high portfolio consistency could be hard to manage. This should not be a large issue in Hasselblad's case. In addition, a very narrow portfolio means that each new product will have a larger impact on how the portfolio and brand is perceived. In the case of Hasselblad's extremely narrow portfolio, the argument could in fact be made that each new product should be concerned a *lead product*.

According to Person et al. (2007) as well as Johnson et al. (2008) brand heritage should be considered one of the most useful foundations for portfolio management. They go on to state that brand heritage is the most powerful in mature industries, something that is accurate in Hasselblad's case.

Another factor to take into consideration is the product history. While the other drivers deal with the consistency of the current portfolio, using product history means finding the right level of consistency over time through similarities with earlier models. As the authors note, the most essential consideration is whether to choose a visual appearance that is similar to the product history to create recognition, or whether to evolve the appearance in order to convey a sense of innovation.

Associated with the level of consistency of the portfolio is the consideration whether to implement vertical or horizontal product lines, vertical design lines being families of products with similar functionality but differing price and appearance and horizontal lines being families of products with a similar appearance but different functionality. Lagers-Dresselhuys et al. (2007) stress that the choice whether to implement horizontal or vertical product lines in consumer products is decided mainly by how the products are displayed at the retailer. Due to the narrow customer segment of Hasselblad, the use of vertical product lines is not considered a plausible portfolio strategy. The benefits of the horizontal product lines can however be made use of since Hasselblad's sole use of authorized retailers ensures that the products will be presented together at the dealer. Presenting horizontal product families with similar appearance together will create what Lagers-Dresselhuys et al. (2007) refers to as a 'billboard' effect.

4.4.2 Design Format Analysis

In order to investigate which design features that were the most characteristic for Hasselblad's cameras, the methodology *Design format analysis*, proposed by Warell (2006), was used. As a first step, a number of Hasselblad camera models were chosen for the analysis. The models were both from the current portfolio as well as previous models. In order to eliminate the risk of using features present in all cameras, a competing manufacturer's camera was included in the test. The model names of the cameras used in the test were: A: *1600F*, B: *500C*, C: *503CWD*, D: *503CXi*, E: *903SWC*, F: *Flexbody*, G: *Xpan*, H: *205TCC*, I: *H4D*, J: *Canon EOS 10D (Competitor)*. Secondly, ten characteristic features were identified in the cameras. These features were:

Chrome edges

The edges of the camera appearing in a contrasting chromed metal.

Cubic house

The camera house being made up of a very basic cube shape.

Light shaft

The camera having a light shaft mounted on top. Note: Some of the cameras could have a light shaft fitted as an accessory, but were not mounted with one by default. Vice versa, some models could have the light shaft removed. Therefore, they were analyzed in the DFA the way they were equipped as default.

Square drop

A distinctive design feature introduced in the very first Hasselblad. Located on the light shaft and shaped like a drop with square corners.

Circular knob

A knob, or handle placed on the right side of the camera house.

White details

White and chrome being predominantly used for digits and details.

Color details

Contrasting colors being predominantly used for digits and details.

Plastic leather texture

The plastic texture of the camera being made to resemble leather

Gray and black color

Use of a contrasting black and gray color scheme for the main parts.

Next, all camera models were evaluated individually based on the features previously selected. If a feature was considered to have a strong occurrence, it was awarded two points, if the occurrence was weak one point and if the feature was not present in the model at all no points were awarded. The results were compiled in a grid and the sum of each row and column was calculated (see fig. 4.7).

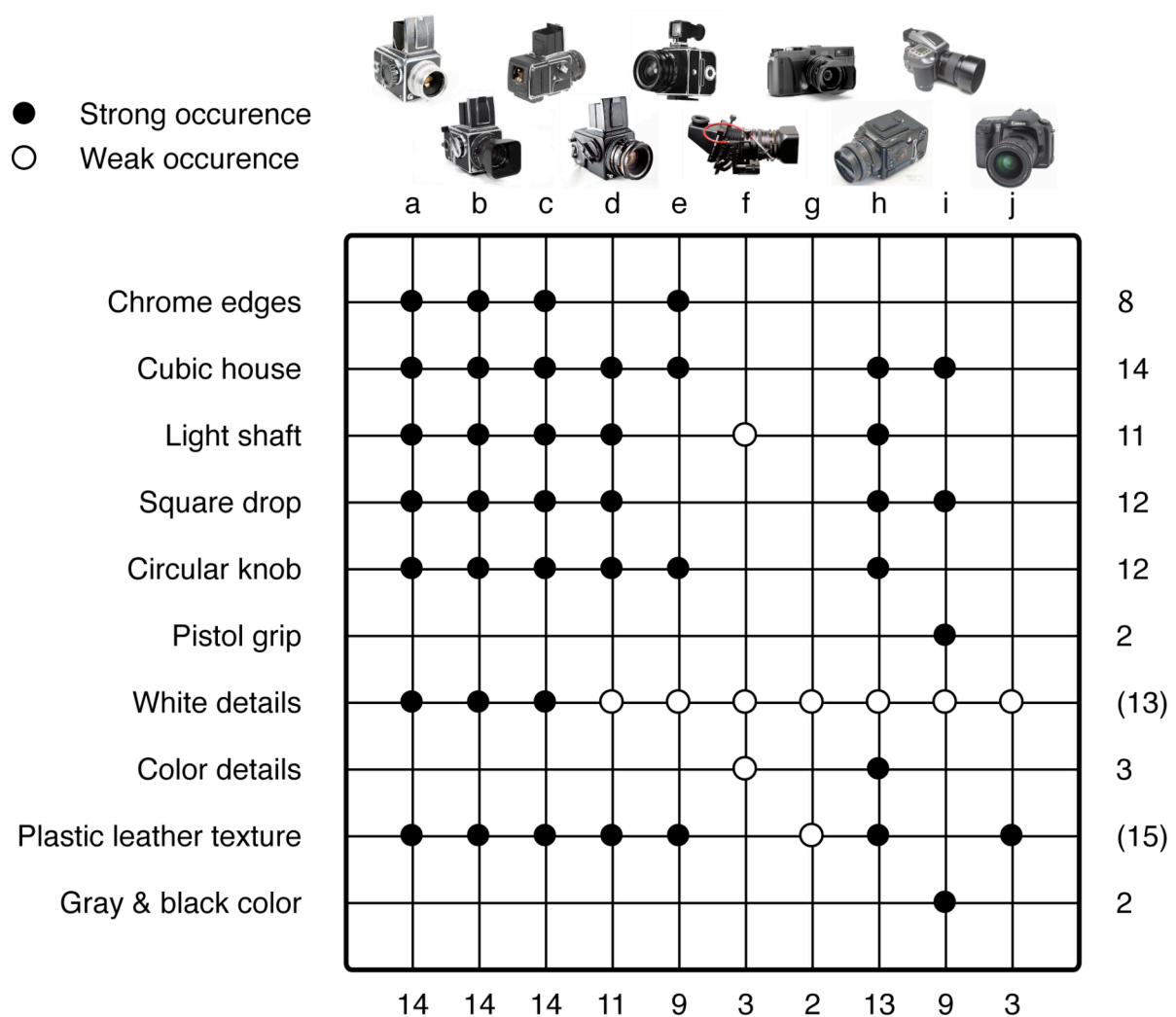


Fig. 4.7. Design format analysis. Source: Author's own work.

The results of the DFA gives a lot of information regarding the design features used in the cameras. Initially, although the features *white details* and *plastic leather texture* were found to occur strongly in most of the models, they were also found in the competitor, indicating that the features should be omitted and not considered to be characteristic for Hasselblad cameras specifically. The features that received the highest score were the *cubic house*, *light shaft*, *square drop* and *circular knob*. Notably, some of the features that were considered to be general for all cameras, for example the leather texture, are not present in the latest Hasselblad cameras. The latest models instead have a smooth contrasting black and gray texture. Another new feature distinguishing the newer cameras from both the previous models and the competitors is a separate pistol grip. Examining the sum of the vertical columns, the scores are in general very high. It would be easy to make the assumption that the model with the highest score would be the flagship product that best expresses what a Hasselblad camera looks like. This assumption is can not be trusted as the score relies on the occurrence of features that were selected on a subjective basis. However, the high vertical scores do indicate that there is a very high visual resemblance between the different models. A larger version of the DFA is presented in appendix 2.

4.4.3 Historical design format analysis

Further elaborating on the results from the DFA, a *historical design format analysis* was created. This was done in order to investigate how the design features of the cameras had evolved over time. In the HDFA the design features found to be the most characteristic in the DFA were plotted horizontally according to the order the cameras were introduced to the market. The result is presented in fig. 4.8.

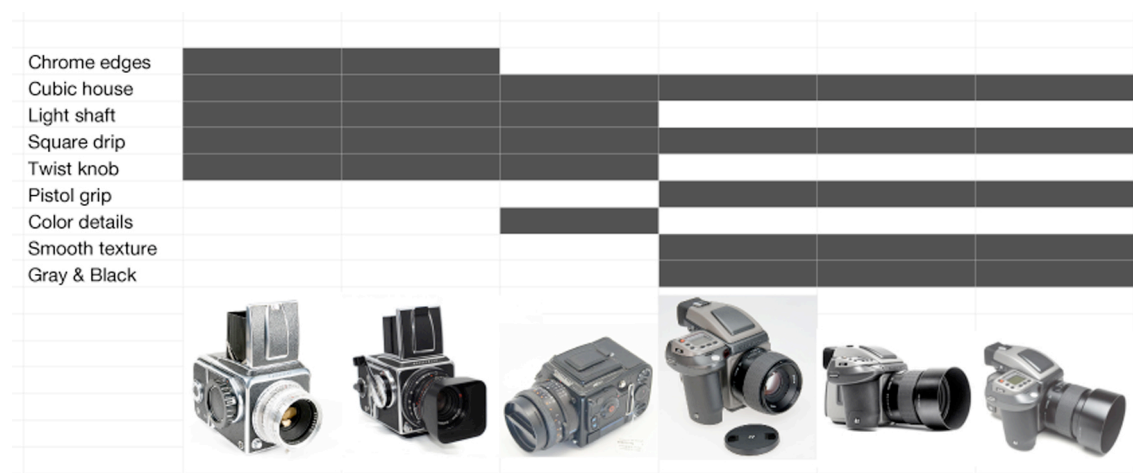


Fig. 4.8. HDFA analysis. Source: Author's own work.

One of the most interesting pieces of information that can be derived from the HDFA is that it is evident that over time, the visual character of the cameras has been extremely consistent. There is however a clear interruption in the appearance starting with the introduction of the H1. Beginning with the H1, which was released in 2002, the cameras no longer had some of the features that were previously considered characteristic for Hasselblad, among these the light shaft and chrome edges. The most characteristic features that have been carried through all generations are the cubic house and the square drop shape.

4.4.4 Reflected consumer

According to Prahlad (2007) the character of the company is in many ways shaped by how the company communicates with the user. Prahlad states that the tone of communication, or the *voice* of the company is expressed not only through text and advertising, but also through images, retailers and the way the company expresses the *reflected consumer*. The reflected consumer is the notion of a perfect user, a user whose lifestyle the *actual* users will aspire for. The perfect example for this has been the Marlboro man. Which is why it is of great importance to investigate how the reflected user of Hasselblad cameras is communicated. One of the most evident channels through which the reflected consumer is communicated is the company's webpage. The majority of content on Hasselblad's official webpage is dedicated to the technical specifications of the cameras. Very little information perceived to be directed to the heart of the consumer is present. User cases are used, but they consist of among others a museum and a plastic surgeon (see fig. 4.9). The museum states the camera's aptitude for documenting artifacts and the case with the plastic surgeon shows pictures of moles and before and after pictures of a rhinoplasty procedure. These user cases do portray the camera's ability to accurately depict its target, but the reflected user is hardly one to be inspired by and to aspire for.

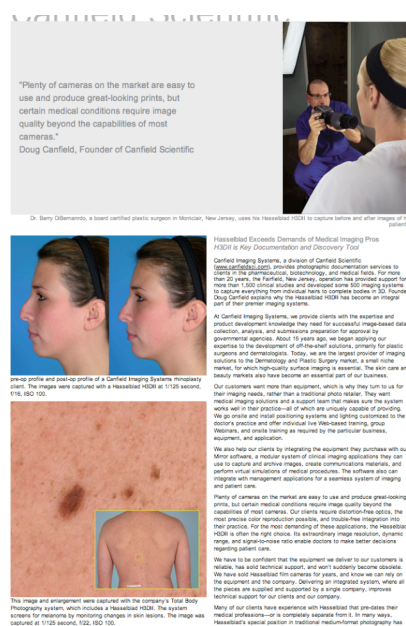


Fig. 4.9. Screenshot from hasselblad.com. Source: Hasselblad (2010b)

4.4.5 The communication: Summarized analysis

Regarding the communication of Hasselblad i.e. how the company 'talks' to the user, through product language, web and other channels, the analysis gave results of great interest. The portfolio analysis gave a great deal of input to the question of the level of consistency that should be used in the current portfolio. In addition it gave useful input for the decision on the level of consistency that should be used in the portfolio over time. The main benefit of high portfolio consistency is brand recognition and reliability. Factors suggesting a consistency throughout the portfolio are: The mature lifecycle stage, the long renewal cycle, the niched and narrow brand position and the narrow width of the current portfolio. The mature market and saturated competition indicate that Hasselblad would benefit from a high portfolio

consistency over time to exploit product history and create recognition. The narrow width of the portfolio also suggests that each new product could be considered so called *lead product* since they will have a major impact on how the portfolio is perceived.

The DFA and HDFA highlighted which design features that were the most characteristic for Hasselblad. The features found were: The cubic camera housing, the square drop shape and the circular knob. The results also indicated that traditionally, there has been very little change in appearance between the models. A strong interruption in visual consistency was however found with the transition to digital cameras. After the transition, the chrome edges and light shaft have been discontinued and instead, new features like a smooth black and grey texture and a pistol grip have been added. The cubic housing and square drop shape have persisted throughout the transition.

Some interesting insights can be made regarding how the reflected user is communicated to the consumer. The key notion was that although a large effort had been made to create a user that convinced the user of the technical superiority of the camera, more emphasis could be placed on making the camera an object of desire, and the reflected user more worthy of aspiring for.

4.5 The user

4.5.1 Interviews

In order to map the needs of the users, several interviews were conducted. In accordance with the views of Griffin & Hausser (1991) the interviews were conducted in a structured fashion, beginning with the simple, straightforward questions and proceeding to the value-based questions. The choice of interview participants was made in order to maximize the qualitative dimension i.e. only expert users were consulted. The photographers interviewed had substantial experience of using Hasselblad cameras professionally. According to Johnson et al. (2008) an important notion is that not only the needs of the end-user should be considered, but also, the retailer should be viewed as a user. Therefore, a retailer was interviewed, this interview proved to reveal important information about the behavior of the end-user. The interviews were conducted over the phone in a semi-structured manner, meaning the questions served as the red thread, but that discussions and follow up questions were frequently used.

4.5.2 Retailer interview

The retailer interview concluded that in combination with top image quality, Hasselblad's respectable brand name was the key selling point. The retailer also confirmed that the vast majority of customers were professional users. Although it is hard to establish exactly how much the users are influenced by the brand name, the effect is more palpable among the clients of the customers. The retailer claimed that since the Hasselblad brand is known to be high-end, using Hasselblad equipment could serve as an assurance of skill of the user. In fact, many users had proclaimed that they had received assignments solely because the clients knew that they used Hasselblad equipment. This is an argument that the retailer used frequently when promoting the cameras.

Regarding development of e-sales, the retailer assumed that since buying a high-end camera is such a big investment, customers would want to go to a physical store instead of buying it online. Thus, e-sales were not considered to be a large threat.

Due to the rapid technical development of digital cameras during the last years, the retailer claimed that the demand from private users had decreased. This is mainly due to the fact that private users are unwilling to make a large investment on a camera that will be outdated in just a couple of years. This is not as big consideration among professional users, since their cameras are usually leased over a two to three year period. Lately though, the development of digital cameras have slowed down slightly and customers are asking for more than just the number of mega pixels. This deceleration in rate of technical development has, according to the retailer, only recently given rise to a more lucrative second hand market, as the used cameras have become more competitive.

The interview also concluded that the biggest manufacturers on the private market, such as Canon and Nikon, were not actually considered to be competitors of Hasselblad. Their quality was deemed to be so inferior that they did not target the same customer segment.

Regarding the way Hasselblad communicate their brand values to their customers, the retailer claimed that traditionally, they have been focusing on the technical specifications but that they lately have become better at being more pictorial and emotional in their communication.

The retailer also mentioned that how the cameras are presented in the store, what selling points that are to be used etc. is up to the salesman. At the launch of a new camera model for example, a minimum amount of information regarding target customers, brand identity and such is given to the retailers. This information is normally limited to the same pamphlets and brochures that are communicated to the public. How the cameras are presented is more based on the experience of the salesman.

4.5.3 Photographer interviews

The photographer interviews gave rise to a great deal of information of significance to the product development. One of the key pieces of information was that they validated the fact that one of the biggest competitive advantages for Hasselblad was the identity of the camera.

One of the photographers had switched from being a long time Hasselblad user to using Canon when he made the transition from film to digital equipment. The consensus was that Hasselblad provided an unparalleled level of quality, but some considered the price to be too high in comparison to the benefits. The photographer who had switched equipment stated that a large disadvantage of Hasselblad cameras was that they were ungainly and not as mobile as the competitors.

None of the photographers saw Hasselblad's *Phocus* photo retouching software as either a barrier or a lock-in. Their opinion was that if you are familiar with one software, you can always figure out how a new one works. Their opinion on how often new camera equipment needed to be bought was around once every three years. This is the same frequency as the retailer stated, but according to the photographers the frequency depended on technological development. The retailer stated that a three-year frequency was the most economically beneficial for tax reasons. All of the photographers that were interviewed had been in the business long enough to remember Hasselblad's history. They stated that the brand was still associated with the golden years and the lunar landing, but they were unsure of how a newer generation of photographers would perceive the brand. The photographers spoke fondly of Hasselblad's previous product models and talked about how they gave an impression of quality through their mechanical design and how they operated. In that sense, the digital cameras were perceived to have become more similar to competitors.

When asked about their willingness to purchase equipment online, they declared that they had no issue regarding the security of online payment. There were according to the photographers several reliable providers and payment methods. The main advantage of physical retailers was considered to be the personal relation to the retailer. In addition, they stated that the willingness to purchase equipment online was probably typical for someone who was already using Hasselblad equipment, if someone was new to the cameras, they would probably want to go to a physical retailer.

4.5.4 The user: Summarized analysis

A key insight in the analysis of the user is that the user in fact is not only the person that will use the camera, but also the retailer. For this reason, a professional retailer of Hasselblad cameras was interviewed. The interview confirmed that the strongest selling point was Hasselblad's renowned brand name and that the vast majority of customers were professional users. It was also stated that a strong brand name gives more than a single advantage, firstly the brand name convinces the customer of the product's reliability, but secondly the retailer stated that the consumer often received assignments from clients because the clients knew they used Hasselblad equipment. The retailer did not consider E-sales a large threat since the consumer was thought to be unwilling to make such a big purchase online. It was however also concluded that the demand from private users had decreased, supposedly because the digital technology was developing so fast it would be outdated in just a couple of years. This being said, over the last years, there had been stagnation in technical development, something that was starting to spark a more lucrative second hand market. Another interesting point was that a minimum amount of information on how the products should be presented was given to the retailer from Hasselblad.

The interviews with the photographers gave additional input regarding the advantages and disadvantages of Hasselblad cameras. The photographers validated some of the retailer's opinions, but contradicted some. Perhaps most pivotally, they validated the fact that a main allure of Hasselblad cameras, along with the high level of quality, was the identity of the brand. Some interesting points were revealed, which contradicted the opinion of the retailer. One such point was that the photographers claimed they were more willing to purchase equipment online than the retailer had declared. In the eyes of the photographers, Hasselblad's software Phocus was not a major concern regarding the choice whether or not to choose Hasselblad equipment. Being unaccustomed to a software was not considered an obstacle, nor was being used to it considered a lock-in since the outlook was that the different softwares were still very similar.

Upon interviewing the photographers, a common personal trait was evident. It was not unusual for them to have had photography as a life-long interest and they shared a true passion for their work. They commonly described photography in a colorful way, stating that the nature of photography was different from most other lines of work in the sense that it was highly creative, emotional and artistic. In fact, they stated that photographing had many similarities with being a musician or a traditional painting artist.

For future development, the information from the user interviews could prove useful as a foundation for devising *personas*.

4.6 Concluding analysis on strategically important preconditions

This chapter will summarize the analysis of the existing preconditions structured according to the basic dimensions proposed by Kapferer (1992); *the context, the company, the communication and the user*. Note that it will in large part be a conclusion of what has been stated in all of the in the previous part analyses. In addition it will be connected to the brand prism model presented in chapter 3.1. This concluding analysis will serve as foundation for the creation of strategy and concept in the following phase of the thesis.

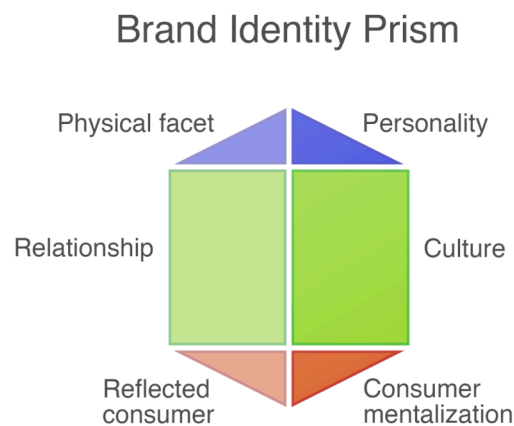


Fig. 4.10. Kapferer's Brand Prism model.

Source: Author's own work, adapted from Prahalad (2007).

4.6.1 The context

The first dimension analyzed was the *context*. Connecting it to the brand prism, it can be seen as surrounding the prism, setting the scene in which the company will be able to create its identity. The analysis mainly revolved around the *five forces analysis*, determining the competitive rivalry of the market and the *SWOT* and *PESTEL analysis*.

Five forces analysis

- The *Threat of entry* is low
- The *Threat of substitutes* is relatively high
- The *Power of buyers* is relatively high
- The *Power of suppliers* is high
- The *Competitive rivalry* is high

The threat of entry is low due to the high entrance barriers of the mature industry; the incumbent competitors have established manufacturing capabilities, distribution channels and customer loyalty. The argument could be made that the rise of digital photography could be viewed as the beginning of a new industry, *but* it is dominated by established actors giving it the characteristics of a mature industry, where competition is fierce and large investments have to be made in order to establish a new competitor.

The threat of substitutes is relatively high due to the high tangible price/performance ratio. Professional users risk substitution to a camera of poorer quality, deeming it to be 'good enough'. To private users a high-end camera can be viewed as a substitute to self-fulfillment purchases such as e.g. a motorcycle, a wristwatch or a trip. The presence of Hasselblad cameras as this type of objects is presently considered quite low.

The power of buyers is considered relatively high due to the low number of customers and the fact that the camera is a non-trivial purchase. The buyer power is lowered by high switching costs and differentiation between competitors.

The power of suppliers is high due to the extremely low number of suppliers that can deliver components of sufficient quality. There are high switching costs and lock-ins involved in switching suppliers.

The competitive rivalry is consequently high, due to the maturity and stagnant industry growth. This is an indication that differentiation from competitors is a good means of competition.

The SWOT/PESTEL analysis identified a number of key drivers and critical factors:

Strengths:

- Well-established brand identity
- Niche offer

Weaknesses

- Limited revenue
- Niche offer

Opportunities

- Social networking
- Environmental restrictions

Threats

- Availability
- E-sales

The analysis shows that an important factor is how to manage Hasselblad's nice offer. The small niche is a strength in the sense that it allows Hasselblad to closely define the needs and demands of their customers. It is also a way to differentiate in a mature industry. It can however also be considered a weakness due to the fact that if the niche starts to become too profitable, it will draw the attention of bigger competitors not currently focusing on the niche.

One of the biggest strengths was considered to be the well-established brand identity. The rich history of the company and sense of authenticity is impossible to imitate for competitors and can be used as a unique strength.

4.6.2 The company

After the conditions of the context had been examined, the next phase of the analysis was to focus on the company itself. In the brand prism, this chapter closely relates to the *physical facet*. As described by Prahalad (2007), the physical facet concerns how the company puts its vision into practice. This is what has traditionally been regarded as brand positioning. Since, according to Prahalad (2007), the products of the company should rather be seen as part of the *communication* of the company i.e. the personality- and culture facets, this chapter deals with the positioning of the company, the mission and vision as well as the concept of strategic drift.

Summarizing the analysis of the mission and vision statements, Hasselblad's brand promise fulfils the theoretical requirements well as it appeals to both the heart and head. The value words *quality*, *performance*, *versatility* and *pleasure of handling* however, were perceived as having the cardinal flaw of being too bland and wide ranging. The most useful word was *versatile* as it provides suitable guidance to the product development.

There are indications that Hasselblad is suffering *strategic drift*. In accordance with the theory, Hasselblad has experienced a period of incremental changes adapting to customers' needs, followed by a period of accelerated market change. This change resulted in a financial downturn that forced Hasselblad into a flux, trying to find its way back to a strategy that is congruent with the market needs. The simile of the *Icarus Paradox* seems apt, as Hasselblad may very well be suffering as a result of the company's past success.

4.6.3 The communication

The chapter on the communication of the company deals with how the abstract ideas and notions of the personality- and culture facets solidifies and how the company chooses to express itself, through commercials, web-pages and product language. As it is the basis for how the user will perceive the company, it is closely intertwined with the reflected consumer-facet. (Prahalad, 2007)

As it is one of the most apparent channels through which the consumer interacts with the company, the chapter dealt largely with management of the product portfolio and the product language.

The portfolio analysis gave a great deal of input to the question of the level of consistency that should be used in the current portfolio. In addition it gave useful input for the decision on the level of consistency that should be used in the portfolio over time. The main benefit of high portfolio consistency is brand recognition and reliability. Factors suggesting a consistency throughout the portfolio are: The mature lifecycle stage, the long renewal cycle, the niched and narrow brand position and the narrow width of the current portfolio. The mature market and saturated competition indicate that Hasselblad would benefit from a high portfolio consistency over time to exploit product history and create recognition. The narrow width of the portfolio also suggests that each new product could be considered so called *lead product* since they will have a major impact on how the portfolio is perceived.

The DFA and HDFA highlighted which design features that were the most characteristic for Hasselblad. The features found were: The cubic camera housing, the square drop shape and the circular knob. The results also indicated that traditionally, there has been very little change

in appearance between the models. A strong interruption in visual consistency was however found with the transition to digital cameras. After the transition, the chrome edges and light shaft have been discontinued and instead, new features like a smooth black and grey texture and a pistol grip have been added. The cubic housing and square drop shape have persisted throughout the transition.

Some interesting insights can be made regarding how the reflected user is communicated to the consumer. The key notion was that although a large effort had been made to create a user that convinced the user of the technical superiority of the camera, more emphasis could be placed on making the camera an object of desire, and the reflected user more worthy of aspiring for.

4.6.4 The user

The chapter regarding the user connects to the two brand prism facets *consumer self-image* and *relationship*. A key insight in the analysis of the user is that the user in fact is not only the person that will use the camera, but also the retailer. For this reason, a professional retailer of Hasselblad cameras was interviewed. The interview confirmed that the strongest selling point was Hasselblad's renowned brand name and that the vast majority of customers were professional users. It was also stated that a strong brand name gives more than a single advantage, firstly the brand name convinces the customer of the product's reliability, but secondly the retailer stated that the consumer often received assignments from clients because the clients knew they used Hasselblad equipment. The retailer did not consider E-sales a large threat since the consumer was thought to be unwilling to make such a big purchase online. It was however also concluded that the demand from private users had decreased, supposedly because the digital technology was developing so fast it would be outdated in just a couple of years. This being said, over the last years, there had been stagnation in technical development, something that was starting to spark a more lucrative second hand market. Another interesting point was that a minimum amount of information on how the products should be presented was given to the retailer from Hasselblad.

The interviews with the photographers gave additional input regarding the advantages and disadvantages of Hasselblad cameras. The photographers validated some of the retailer's opinions, but contradicted some. Perhaps most pivotally, they validated the fact that a main allure of Hasselblad cameras, along with the high level of quality, was the identity of the brand. Some interesting points were revealed, which contradicted the opinion of the retailer. One such point was that the photographers claimed they were more willing to purchase equipment online than the retailer had declared. In the eyes of the photographers, Hasselblad's software Phocus was not a major concern regarding the choice whether or not to choose Hasselblad equipment. Being unaccustomed to a software was not considered an obstacle, nor was being used to it considered a lock-in since the outlook was that the different softwares were still very similar.

Upon interviewing the photographers, a common personal trait was evident. It was not unusual for them to have had photography as a life-long interest and they shared a true passion for their work. They commonly described photography in a colorful way, stating that the nature of photography was different from most other lines of work in the sense that it was highly creative, emotional and artistic. In fact, they stated that photographing had many similarities with being a musician or a traditional painting artist.

5. Case: Aligned strategy- and concept creation

This section of the report will include development of a strategic product development plan for Hasselblad as well as conceptual development of how the plan might be implemented. The creation of the strategic product development plan will draw heavily on the conclusions from the previous chapter. Initially, strategic goals will be derived based on the analysis, next, possible product development measures will be created and evaluated.

5.1 Formulating strategic product development goals

This chapter determines what strategic goals the upcoming conceptual development should strive to accomplish. The goals are based on the current preconditions and perceived shortcomings of the present approach.

- ***Acquire a stronger brand awareness among private consumers***

Note that the first goal of creating greater brand awareness among private consumers does not necessarily entail that the sales in the private market has to be increased. Keeping in mind that the target audience is and should continue to be primarily professional users, this goal draws mostly on the insight made in the interviews; that even though the needs that the user often express when they are asked concern quality and other palpable features, *photographers are people too*. This means they will perceive a strong brand name as a promise of reliability and that part of their purchasing behavior will be based on gut feeling. The interviews revealed that occasionally photographers would get assignments as a sole result of that their clients recognized that they were using Hasselblad equipment. This is a major advantage and one that increases with the increased awareness of private consumers.

- ***Decrease the gap between vision statement and reflected user***

The analysis revealed that there might be a discrepancy in how the vision statement is communicated through the reflected user. The mission statement implies a very aspirational image of professionalism and artistry. There were however indications that particularly the artistry aspect was overlooked in the communication of the reflected user.

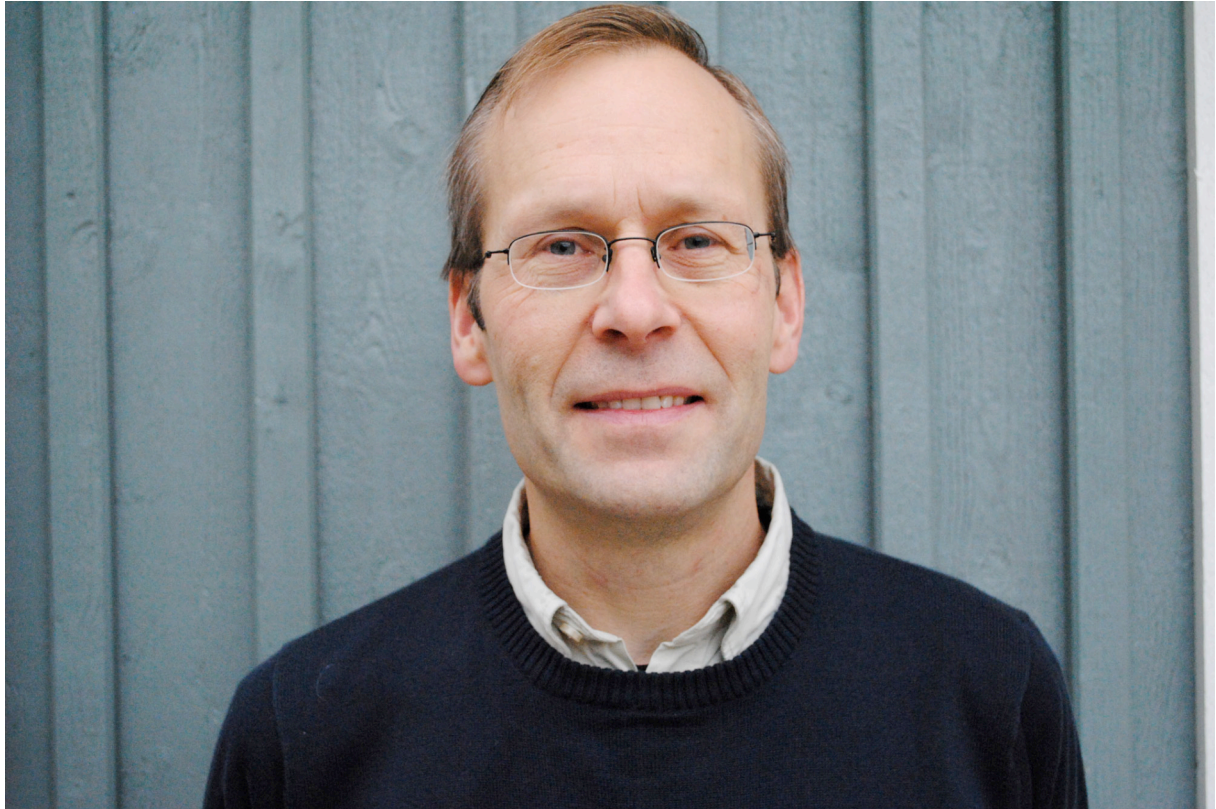
- ***Create a stronger, more iconic and recognizable product***

At the present, a problematic aspect is that there is very little recognition between the outcome of a photographer's work and how it was created i.e. someone who looks at a picture rarely knows what equipment the photographer has used. In order to create greater recognition, future products should be designed in a way that entails more instant recognition of what equipment the photographer uses.

5.2 Personas

As part of preparing for future concept development, two personas were created. The personas contained the results of the user interviews as well as notions from the communication analysis in a very accessible way and proved instrumental in generating concepts with strong correlation to user needs.

Persona 1:



Name: Ove Svensson
Professional photographer
Age: 54
Typical assignment: Commercial, Stock photography
Self-employed
Swedish
Well-structured
Interested in old American cars
Has a wife and two children

Persona 2:



Name: Yves Bertrand
Photography artist
Age: 42
Typical assignment: Gallery/Museum, Fashion
French
Eccentric
Artistic
Impulsive
Married. Occasionally.

The personas were intentionally created to encompass different qualities. The first persona is intended to be more reflective of the actual user, while the second user was created to embody the aspirational user. Awareness of the different dispositions of the personas will provide accessible information in devising future concepts.

5.3 Moodboard

In order to closer define the character of the brand and the preferred expression of future products a moodboard was created. The starting point for the moodboard was Hasselblad's core values; *Quality, Performance, Versatility and Pleasure (of handling)*. In addition to defining the values, the moodboard explores the finer nuances and provides inspirational guidance for concept expression. The moodboard is presented in fig 5.1. (A larger version is available in appendix 1)



Fig. 5.1. Moodboard for new Hasselblad concepts. Source: Author's own work.

A key expressional note in the moodboard is that of artistry and celebrity. The exquisite hands of the piano player as well as Picasso and the musician David Gilmour gives an impression of confident and acknowledged creative ability.

In addition to creative artistry, the picture of David Gilmour portrays him using one of the most iconic guitars in the world, the Fender Stratocaster. In combination with the Harley-Davidson motorcycle it represents instantly recognizable products that have become iconic and in fact represent something larger than their own functionality.

The pictures of the moodboard are also meant to inspire thoughts of legendary greatness. From "The Greatest"-Muhammad Ali to the honest, time-honored products, there is a sense of authentic heritage.

With regards to Hasselblad's original values, the exclusive products all express an exclusive level of quality and elicit emotions of desire.

5.4 Concept creation: Ideation and selection

In order to create a number of concepts for how the strategic goals could be met, an ideation phase was conducted. The ideation consisted of an ordinary brainstorm but in order to ensure that the ideas would be congruent with the strategy, a number of additional influences were used. For the conception of product development actions, the major inputs were the personas and the moodboard. For creation of product concepts, the results from the DFA and HDFA were instrumental in providing inspiration.

The ideation provided a vast number of ideas, which needed to be evaluated. The evaluation was carried out in a very structured way similar to that of a *Pugh matrix* (see e.g. Landqvist, 2001) but with the addition that the concepts were evaluated based on their ability to fulfill the strategic goals. The following chapter will present the ideas that were chosen in three parts, as well as some of the ones that were discarded and why.

5.4.1 Part one: Square picture frame

The concept: Change the format of the pictures to completely square and add a Hasselblad specific frame around each picture.

Historically, Hasselblad used a completely square picture format in their cameras (originally 6 by 6 centimeters). In addition, their film cameras were constructed in a way that gave each picture a distinct black frame with two notches on the left side, see fig 5.2.

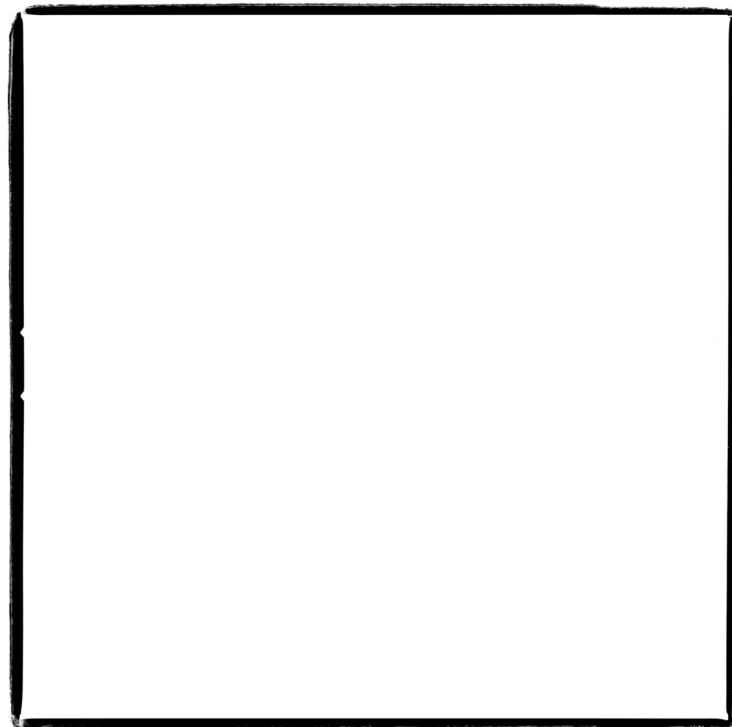


Fig. 5.2. An original Hasselblad picture frame. Source: Ranum (2008)

With the transition to digital cameras, Hasselblad opted for a more standardized landscape format (6 by 4.5). The move to digital technology also meant the internal construction of the

cameras changed, causing the frame with the notches to disappear. The notches had previously been a telltale sign that the photographer used a Hasselblad camera.

How it connects to the strategic goal(s): The strategic goals stated a disadvantage in that it currently is impossible for someone who watches a picture to see what equipment the photographer has used. This concept allows a spectator to see that a picture was taken with a Hasselblad camera. This in turn is very beneficial to the goal of *acquiring a stronger brand awareness among private consumers* as the users become more aware that famous photographers use Hasselblad cameras. There is also a psychological difference attached to this concept, as it allows the owner of a Hasselblad camera to ‘show off’, it subconsciously communicates that ownership of a Hasselblad camera is a source of pride.

Also, a great advantage of this concept is that it builds from previous product history. Although the concept could be considered an anachronism, i.e. a replicated element from a different era, the analysis showed that one of Hasselblad’s key competitive advantages was their historical legacy and authenticity as it was something the competitors could not imitate. If a younger competitor had tried something similar without having the product history to draw from e.g. a small water stamp, it would quite probably not be as well received. Utilizing the possibilities of digital technology, the concept could be implemented so that the features do not have to be permanent, but rather optional to the user. If so, the features should however be activated by default. This will ensure that the user will not experience the features as constraints. The fact that the user becomes more aware that famous photographers use Hasselblad cameras highly influences the goals of creating better recognition and a more aspirational reflected user.

5.4.2 Part two: Signature models

The concept: Create special editions of the standard models that have been set up in collaboration with famous photographers in order to fit their preferences.



Fig. 5.3. Hasselblad signature model (artist's rendering)

The inspiration for this concept came from the user interviews. The interviews indicated that in order for the image of a reflected consumer to be appropriate, it should focus more on the emotional aspects of photography, and less on the technical aspects. The interviewees stated that they thought the nature of photography was very different from most other fields of work and that photography had many similarities with traditional art, music and other creative fields. Drawing from that fact, this concept is based on a strategy that many companies manufacturing high-end musical instruments employ. The classic electric guitar Fender Stratocaster, which has been mentioned earlier, is available as what Fender calls the 'Artist Series', a version of the instrument set up according to a famous musician's preferences. The model is then given the name of the artist e.g. "The Eric Clapton Stratocaster". This is a clever way for Fender to affect their reflected consumer, and one that partly can be mimicked by Hasselblad.



Fig. 5.4. An Artist series Eric Clapton Fender Stratocaster. Source: Fender (2010).

How it connects to the strategic goal(s): It is important to note that the main purpose of this concept is *not* primarily to increase sales in the private segment, but rather to heighten the brand awareness among private consumers, hence it connects to the second strategic goal. The long-term benefit of larger recognition is primarily the solidification of Hasselblad as the 'top of the mind'-brand in professional photography equipment. An additional benefit is that the knowledge among professional consumers that Hasselblad is considered the premiere brand among private users will make a professional user appear more competent in the eyes of

clients if he uses a Hasselblad camera. This increases the chances that the photographer will receive assignments as a result of the client's recognition of the high-end equipment.

This concept should be put in relation to another idea for a concept that was discarded in the selection process, which was to hire a high profile designer to give the camera a new eye-catching design. This move would not be very improbable from a company that is experiencing a financial downturn and feels the need to make drastic changes. The impending danger however is that such a move might be perceived as desperate and shallow, as a new look but no improvement to the technology. Creating signature models on the other hand, sends completely different signals. First of all, it shows that the photographer is proud to use a Hasselblad camera. Secondly, using the reference to the music industry augments the idea that a camera should be viewed as the instrument of an artist rather than just a machine for high-resolution depiction. In addition, the fact that the cameras give the photographer the ability to customize their camera as they wish connects to the core value of being versatile.

5.4.3 Part three: Light shaft

The concept: Construct an iconic vertical viewing device reminiscent of the light shafts used on the traditional film cameras.

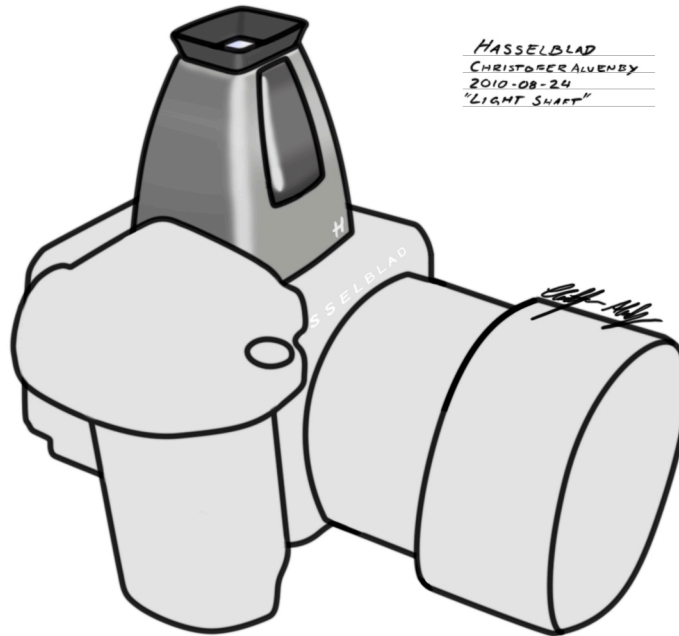


Fig 5.5. Light shaft sketch. Source: Author's own work

The DFA showed that one of the most distinctive design features associated with Hasselblad cameras were the light shafts of the film cameras.

Apart from the fact that the light shaft was strongly associated with the Hasselblad brand, it also included functional benefits as the photographers stated that the way a camera with a light shaft was handled seemed less obtrusive to the person they were photographing. This is very beneficial since Hasselblad cameras often are used for portrait photography.

How it connects to the strategic goal(s): Taking on a wider perspective on design, this concept allows design to be more than just the surface of a product. This concept affects not only the way the product looks, but also the way the user interacts with it. Occasionally, the way a user interacts with a product says more about the character of the product than the details of the design does. An example of this could be motorcycles (see fig 5.5 & 5.6)



Fig. 5.6. Biker posture 1
Source: Author's own work

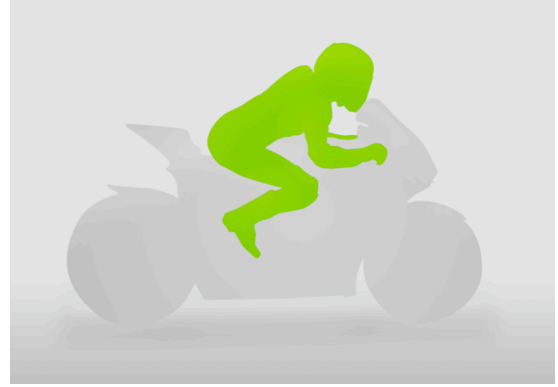


Fig. 5.7. Biker posture 2
Source: Author's own work

The figures (5.6 & 5.7) describe how the different characters of the two motorcycles are communicated largely through how their users interact with them. The example shows how, just from the posture of the users, we draw conclusions about what the products are like, who uses them, for what purpose they are used and so on. With this concept, the same notion can be taken advantage of with cameras. Connecting to the third strategic goal, creating a more iconic and recognizable product, adding a light shaft drastically changes the way a user interacts with a Hasselblad camera (see fig. 5.7 & 5.8). This makes the camera vastly more recognizable, as only a fast glimpse at a photographer is required to be able to identify that a Hasselblad camera is being used. Also, this instant identification is possible from a much larger distance than what would be needed to discern the difference between the other competitors.

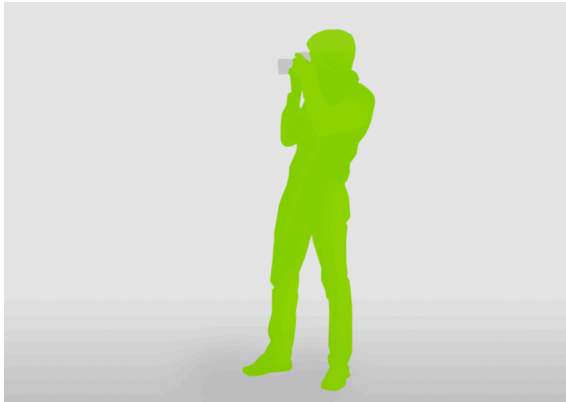


Fig. 5.8. Traditional posture
Source: Author's own work

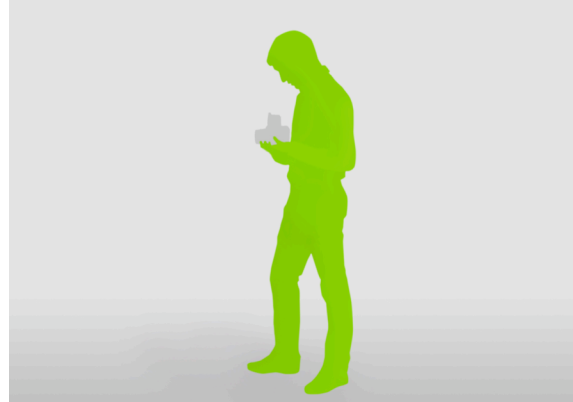


Fig. 5.9 Posture with light shaft
Source: Author's own work

Comparing the two modes of interaction (fig. 5.8 & 5.9) the light shaft posture creates a completely different expression. While the traditional posture expresses a state of agitation and coincidence, the light shaft posture expresses a state of calmness and contemplation. Instead of relying on luck and quantity over quality, the Hasselblad photographer carefully plans the composition of each shot making every picture count.

Like the first concept, it is possible to implement this concept in a way so that the user does not feel limited. That is, the user should be provided with the option to alter their camera for horizontal viewing. However, like the first concept, the light shaft should be the default mode.

Yet another benefit of this concept is that it connects to the company's previous product history, emphasizing the reliability and legacy of the products. This is highly beneficial since Hasselblad is currently undergoing radical change. A similar example that is worth mentioning would be how Volvo worked with launching their C30 model. At the time that the C30 was created there was a fear that the small hatchback would not be perceived as a Volvo. For this reason Volvo used design features from their own product history and made a point of letting the consumers know that for example the glass rear hatch was a design heritage from their 1960's model p1800. In the same way Hasselblad can connect innovative design to their glorious product legacy.

6. Conclusion

In conclusion, the main purpose of examining how Hasselblad can develop future products has been thoroughly evaluated. Initially a relevant theoretical framework was established. The theoretical framework focused on methodologies for evaluating strategic preconditions and how to incorporate the results of such an evaluation in the creation of new product concepts. Subsequently, the theoretical framework provided the overall structure of the report as well as the methods used. In order to concretize the notions of the methods they were implemented in a fictional product development case for the camera manufacturer Hasselblad.

The first phase of the case consisted of conducting an analysis of strategically significant preconditions in the camera industry. The analysis concluded that there were some improvements that could be made regarding the management of Hasselblad's identity and how that identity was communicated through their products. A key notion that was revealed was that one of Hasselblad's most valuable assets was their heritage and proud brand character. The reason for this high valuation was that it was regarded as a competitive advantage that is impossible for competitors to replicate.

After the full analysis had been compiled, the next phase commenced by aligning the concept creation with the strategy. Based on the analysis of the preconditions, a set of strategic product development goals were formulated. These goals revolved around creating a stronger brand recognition among private consumers, creating a more aspirational reflected user and constructing more iconic, instantly recognizable products. To further influence concept creation strategically, a moodboard portraying the preferred expression of future products was created. The moodboard highlighted a strong sense of artistry and authentic heritage. In addition to the moodboard, personas, or user profiles, were created in order to capture the results in an accessible way.

In the next step of the development, concept creation, the strategic goals, moodboard and personas proved to be of great important in steering how the concepts were created. After a large quantity of ideas had been generated, they were evaluated according to how well they fulfilled the strategic product development goals. This evaluation resulted in the selection of three product development concepts. The concepts were heavily influenced from the goals and largely dealt with attempting to take advantage of Hasselblad's heritage. The first concept meant changing the default picture format to completely square and giving the user the option to publish the pictures with a black, notched frame. Both the format and the frame references earlier Hasselblad product features and was considered to create stronger attribution of the final result to Hasselblad and in addition, they were considered to establish a stronger brand image among the users. The second concept borrowed inspiration from the music industry, with proposing development of signature models. Signature models would be standard camera models that have been set up in collaboration with famous photographers in order to fit their personal preferences. The signature models are not meant primarily to sell in large quantities, but rather to create a more aspirational reflected user. Similarly to the first concept, the third concept draws heavily from Hasselblad's design heritage. It proposes creating a viewing device similar to the light shaft of the traditional cameras. Apart from referencing the company's past, it is mainly meant to affect how the user interacts with the camera. Creating a "new" way of interacting with the camera drastically changes the expression of the user's mindset. Besides being much more instantly recognizable than the competitors, the altered mode of interaction expresses a different style of photography. It expresses that instead of

relying on coincidence and luck, the Hasselblad photographer is more contemplating, making every exposure count.

7. Discussion

In viewing the limitations of the concepts, one can generally make the observation that they focus heavily on the improvement of Hasselblad's intangible qualities. There are many untreated dimensions to take into consideration during later stages of product development. Such dimensions include closer examination of the users' physical and functional needs as well as more specific economical requirements.

One of the most important aspects to highlight in this discussion is the impact of the delimitations. The premise for this thesis was to only consider the product development of Hasselblad's cameras. This is a significant delimitation as Hasselblad in fact also manufactures peripheral equipment such as scanners as well as their own computer software "Phocus". This peripheral equipment may quite possibly impact the strategy of the product development. Consequently, if there were to be a continuation on the work in the thesis, those effects should be evaluated. One aspect of interest may be the level of consistency over the portfolio across the different products. The effects of providing a separate software should also be analyzed, the pivotal question being if the software creates a beneficial lock-in effect for the current customers, or whether it creates a harmful barrier towards new consumers.

An additional aspect worth noting is that the segment of product development that has been the attention of this thesis represents a very early section of a much longer process. The concepts presented are therefore to be considered primarily as examples of how the strategy could be implemented. If the concepts were to be developed further careful investigation of physical user needs should be performed. An additional aspect that would be of interest in the case of further development is the management of change. In order for the changes to be successful they must be feasible in terms of organizational restructuring and possible production changeover.

It is worth mentioning again that the thesis in no part was carried out as an official assignment for Hasselblad. Therefore, any resemblance between the notions and concepts presented and Hasselblad's actual product development is entirely circumstantial. Quite possibly there are affecting internal aspects within the company that are not discernable for an external observer. Had Hasselblad had any involvement with the project it would have added validity if they would have confirmed the accuracy of the precondition analysis.

As with any project concerning strategy, there are no absolute truths. This is reflected in the fact that many of the methods, specifically concerning concept creation, inevitably involve a certain amount of subjectivity. The strategic concerns should in no way be considered to eliminate the subjectivity in creative work completely, but rather they provide the possibility to make better-informed choices.

In recommending further academic research, it appears that there is a need for more interdisciplinary investigation. It seems as though there are many theories on strategy and product design respectively, but theory linking the two disciplines together is scarce. Suggestions on research probable to be greatly beneficial include creation of methods for influencing concept creation with strategic considerations as well as methods for assessing the benefits of different strategic product development options.

It is evident that strategic concerns are an important part of design and that careful consideration during the early stages of product development is vital as a part of a wider understanding of the product development process.

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Appendices

Appendix 1. Moodboard

Appendices

Appendix 1. Moodboard

Quality

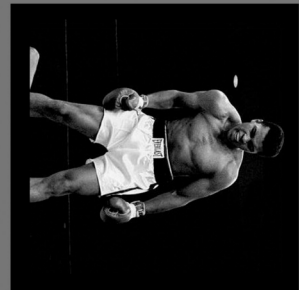
Performance

Versatility

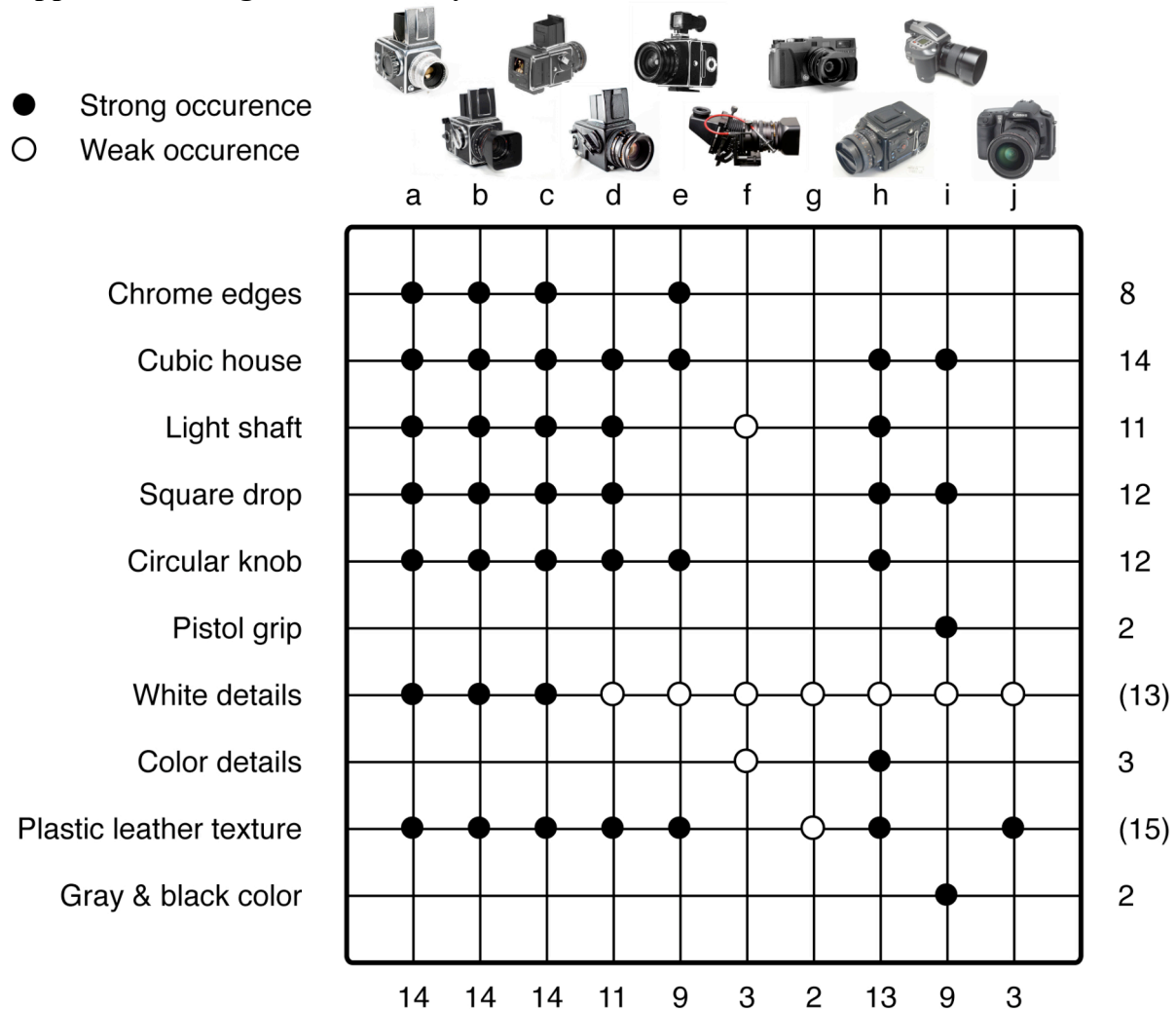
Pleasure



H A S S E L B L A D



Appendix 2. Design Format Analysis.



Chrome edges - The edges of the camera appearing in a contrasting chromed metal.

Cubic house - The camera house being made up of a very basic cube shape.

Light shaft - The camera having a light shaft mounted on top. Note: Some of the cameras could have a light shaft fitted as an accessory, but were not mounted with one by default. Vice versa, some models could have the light shaft removed. Therefore, they were analyzed in the DFA the way they were equipped as default.

Square drop - A distinctive design feature introduced in the very first Hasselblad. Located on the light shaft and shaped like a drop with square corners.

Circular knob - A knob, or handle placed on the right side of the camera house.

White details - White and chrome being predominantly used for digits and details.

Color details - Contrasting colors being predominantly used for digits and details.

Plastic leather texture - The plastic texture of the camera being made to resemble leather

Gray and black color - Use of a contrasting black and gray color scheme for the main parts