Visual Identity Effect on Sales in H&M

Linhui Bian 890422-T267
Qiudi Jiang 881028-T389

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Supervisor:
Professor Akmal Hyder
Foreword / Acknowledgement

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Abstract

Purpose — The purpose of this thesis is to find how visual identity components impact on the sales of H&M. Through the establishment of a theoretical model.

Methodology/approach — Base on the model, the thesis used qualitative research and quantitative research method. The qualitative research method referred to the interview with H&M managers. The quantitative research method referred to questionnaires for 120 customers and the Eviews analysis software. Eviews analysis software was used to analyze the mathematical relationship between the visual identity components and H&M sales.

Findings — Through the analysis of the questionnaire and interviews, the thesis found that logotype and/or symbol, advertising and storefront were more important components for H&M sales among the eleven visual identity components. By the Eviews analysis software, the thesis analyzed and found the quantitative relationship between these three visual identity components and the sales revenue of H&M.

Research limitations — First of all, the literature on the study of the visual identity for the company is rare. Second, the result of H&M’s analysis may not be applied to all brands.

Originality/value — The results showed that H&M can invest more on these three important visual identity components we identified to increase their sales revenue. This is a more effective way for brand awareness. At the same time, this paper fills the gaps in the related articles. The thesis is a detailed research of the important visual identity components impacting on the company.

Keywords — Visual identity, Visual identity components, Advertising, Logotype, Storefront

Paper type: Research paper
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1. Introduction

This chapter firstly introduces the research background and research motivation. Then explain the purpose of the thesis. This is the paper's core content. The fourth step introduces the thesis research questions, in order to better accomplish research purposes. Finally this chapter explains the limitations and the distribution of follow content.

1.1 Background

As the economic environment changes, more and more scholars are interested in corporate identity in the past few decades (Melewar, 2001). The market has become more globalized. Corporate expansion is increasingly difficult. It is a difficult task to make more customers to remember a corporate or a brand. The Importance of corporate identity is recognized by more corporates (Melewar, 2001).

Corporate identity is not only a logo or livery, but it also is described as a strategy (Bassett et al, 2006). Using it cleverly could bring unexpected rewards for the corporate, because of corporate identity includes many intangible characteristics (Bosch et al, 2006). Melewar, Bassett and Simoes (2006) elucidated the concept of corporate identity, especially for communication and visual identity. They explained how organizations changed or shaped their own corporate image in market (Bassett et al, 2006). Corporate identity extends beyond the company's logo and name. It covers all forms of internal and external communication for the company. It means that corporate identity is a strategic resource. Good corporate identity can form and maintain the competitive advantage for company (Bassett et al, 2006).

Corporate identity includes three factors: mind identity, behavior identity and visual identity. Among these three factors, visual identity has been regarded as the most significant (Bassett et al, 2006). Therefore, in this study we have focused only on visual identity.

1.2 Visual Identity

Visual identity plays an important role in organization (Bosch et al, 2006). Bosch,
Elving and Jong (2006) investigated visual identity from an organizational perspective. They proved that the characteristics of organization were affected by visual identity management. This kind of visual identity management also impact on visual identity. But there is no evidence to prove a direct relationship between organizational characteristics and visual identity. Multinational companies need pay special attention to the globally consistency on corporate visual identity (Melewar, 2001).

Visual identity changes the organizational image. It is the most direct management method. Corporate establishes a new corporate image in the process (Bosch et al, 2006). Therefore, visual identity is a principal factor in strategic decisions, such as mergers, takeovers and acquisitions (Bosch et al, 2006). To develop a new visual identity, there are challenges and opportunities for corporate identity and strategic changes. Barthelme et.al. (2011) presented the importance of visual identity for corporate restructuring. They proposed the importance of sensory and auditory in visual identity - Sensory and auditory identities play a guiding role for practitioners (Bartholme et al, 2011).

Visual identity includes all visible components of corporate identity (Balmer et al, 1997). Visual identity has five basic components. There are name, logotype and/or symbol, typography, colour and slogan (Melewar et al, 1999). Visual identity also has some projected components. They are printed materials, uniforms, equipment, packaging, advertising, exhibition design, and exteriors (Melewar, 2001). Good examples are “M” of McDonald and Mermaid logo of Starbucks. Brands are allowed to have their own visual signs. Another representative example is H&M. H&M is a successful brand. Almost all literatures of H&M are analysis about H&M’s marketing model. However, even though the business model is one of the factors to H&M’s success, we assume that H&M’s visual identity is also an important factor for its success. This study therefore deals with the role of visual identity on H&M.

**1.3 Motivation**

There are many brands on the existing market, but not every brand can be successful. This thesis can help brands be successful by analysis the influence of brands from visual identity. Visual identity plays an irreplaceable role in the organization (Bosch et
Visual identity is mainly used corporate at present. But this thesis used visual identity in a brand. We believed that the visual identity also has influence in a brand. So we chose H&M, a successful brand, as a representative to discuss the influence of the brand.

H&M is the most influential brand in H&M Company. We choose H&M for our case study because H&M occupies a certain amount of market share in the world clothing market. It has many stores around the world, including Asia, Europe and the United States. It’s very successful international brand in the whole world (Lopez, C. et al, 2009). This thesis needs a brand for its case study, which has high popularity and strong universality in the world. H&M is the most suitable case. On the other hand, H&M’s success is obvious in the world clothing market. The secret of H&M’s success is worth to explore. As we mentioned, H&M’s business model is special, but visual identity of H&M is also characteristic. H&M's visual identity is a successful case about visual identity. Through our research, we believe that H&M's success is due to the successful application of visual identity. However, the relevant literature does not relate its success to its visual identity. This is why we choose the H&M brand to study the visual identity.

Because of this thesis is talking about influence of H&M brand’s sales by visual identity. Therefore, the conclusions of this thesis would help H&M and other similar brands to improve their efficiency of investment. Meanwhile, the thesis approached H&M with some suggestions, and these suggestions also apply to other similar brands. If some brands hope to achieve more success, this thesis will help them. In thesis we therefore focus on the impact of visual identity on the H&M sales

1.4 Purpose

- This thesis focuses on the impact of visual identity components on the H&M sales.

Visual identity includes a plurality of components. The visual identity affects the development of a brand. In this thesis, we explicitly found those more important visual identity components, which have more impact on H&M. We can know how these components impact on the H&M sales through the quantitative analysis.
Based on precise software analysis, this thesis proposed suggestions for H&M's future development of globalization in the last part. In the past literatures, visual identity is only regarded as a whole element to study. No literature analyzed different visual identity components in detail. Most literatures are only qualitative analysis. The importance of these important components has not been clearly identified. This study is innovative in this regard, and to fill the gap in this area of research.

1.5 Research Questions

➢ Which visual identity component is more important to H&M sales?

As previously mentioned, visual identity includes many components (Balmer et al, 1997). For different brand, the importance of various visual identity components is different. For H&M, the importance of these visual identity components is also different. The first research question focuses on finding those important visual identity components to H&M sales. First of all, we search many theories about the visual identity components, and set hypotheses for different components. Base on these hypotheses we design the questionnaires and interviews to collect data, and then answer the first research question.

➢ How these more important visual identity components do impact on the sales of H&M?

After the completion of the first research question, we obtain these important visual identity components to H&M. But this is not enough. We need accurately analyze how these important visual identity components affect the H&M sales. We choose the Eviews analysis software to answer the second question. This is innovative point of this thesis, which is different from the other literatures. Based on the results, we can put forward some recommendation from visual identity aspect on the future development of the H&M.

1.6 Limitation

Firstly, the literature on the study of the visual identity for the company is rare. Hence, the information we obtained from the existing literature is very limited.
Secondly, the result of H&M’s analysis might not be able to use in all brands. Or the indicative effect is not a complete response. After all, H&M is a Swedish brand, although it’s influential in the whole world, but we can not guarantee that its finding could used in all brands.

### 1.7 Disposition

The second chapter is a Theoretical review. This chapter explores the characteristics of the visual identity and different visual identity components. In this chapter, based on the existing theories in the literature, we established hypotheses for visually identity components. Finally, we created an own theoretical framework to guide the whole thesis.

The third chapter is Methodology. It presents the research agenda, that how the research and the theories are linked. And it shows the research strategy. Then it explains the research methods we chose and the collection of data. Next, it showed the data source of the Eviews analysis software and the process of Eviews analysis software. Finally we explained the validity and the reliability of the study and the way we analyzed the data.

The fourth chapter is empirical finding. The empirical finding includes the case introduction of H&M, quantitative finding of questionnaires, and qualitative finding of interviews. After a description of these three areas, these data will be clearer for data analysis in next chapter.

The fifth chapter is analysis. The analysis consists of three parts. They are analysis of hypothesis, analysis of the Eviews Software, and reflection of theory framework. Through by the analysis of hypothesis, we found out a few relatively important components on H&M sales. Then, through calculation in Eviews part, we get the results that would tell us how those components affect on H&M Sales. Finally, it discussed and modified the created theory framework with the analysis for the study.

The sixth chapter is conclusion. It has four parts: results of the research study, contribution, implication and further research. The first part is the summary of results. The second part is about the contribution to society and related fields. The third part is the implication for H&M manager, and the last is further research.
2. Theoretical Review

This chapter is a theoretical review. It mainly consists three parts. The first part is a literature review about visual identity. This part introduced relevant literatures. The second part is the eleven visual identity components. This part described the specific content and characteristics of the eleven visual identity components. They are name, logotype/symbol, typography, colour, slogan, uniform, printed material, equipment or facility, package, advertising and storefront. The third part is the created model. In this part, we created a new model for the visual identity components.

2.1 Literature Review

In the international market, the competitive advantages of manufacturers, such as technology, design and function, are not obvious. Increasingly consumers have more choices among similar designs and products (Melewar, 2001), because products are no obvious differences in the price, quality, design and functionality (Kennedy, 1977). Therefore purchases decisions are increasingly influenced by a positive visual identity (Kennedy, 1977). Companies find that the corporate visual identity is the most direct information. So they have to establish a standardized visual identity to create a competitive advantage (Melewar, 2001).

The Visual Identity System (VIS) is the core of a firm's visual identity (Melewar et.al., 2010). Visual identity has not a unified definition, but the content as roughly same. Balmer (1995, p.26) shows the term “visual identification” is referring to the visual elements of corporate identity. “Visual identification: This refers to the way in which an organization uses logos, type styles, nomenclature, architecture and interior design, etc. in order to communicate its corporate philosophy and personality”. The basic components of corporate visual identity are its name, symbol and/or logotype, typography, colour and slogan (Dowling, 1994; Olins, 1990;Melewar et.al., 1999). Visual identity also has some projected components. There are printed materials, uniforms, equipment, packaging, advertising, exhibition design, and exteriors (Melewar, 2001).
2.2 Visual Identity

With the changes in technology and products, corporate visual identity has become the most important key factor when consumers choose products (Balmer, 1995). “Increasingly, customers ‘buy the company’ that makes the product; buying its character, its size, its identity and the confidence it inspires.” (Melewar and Saunders, 2000, pp.539).

The corporate visual identity is one part of its deeper corporate identities (Abratt, 1989). Melewar and Saunders (2000) pointed out that “Corporate visual identity is the domain of designers while corporate identity is the domain of organizational theorists” (Melewar and Saunders, 2000, pp.539). Element of corporate identity, include visual identity, should command instantaneous recognition and signify companies' quality and personality (Abratt, 1989). Visual identity can give advantage to corporate over competitors. It has ability to attract employees and convince financial institutions and local governments (Melewar and Saunders, 2000). Between 1989 and 1993, due to the focus on corporate identity, the revenue growth rates of the various industries were between 22% and 30% in the UK (Melewar and Saunders, 2000). The majority of the revenue is from the design of corporate visual identities. Increasingly accomplished companies realize that they are part of the society. The public accepted the visual identity (Melewar and Saunders, 2000). This does not only give staff a sense of community and pride, but also enhance the company's reputation in the society. It is invisible competitive advantage (Melewar and Saunders, 2000).

In a company-specific study, Lee (1983) pointed out that Firstar Corporation’s unified standardized visual identity system, covered a wide range, including signs, internal office supplies, staff uniforms, and transport vehicles (Melewar and Saunders, 2000). Firstar trademarks and designs are covered almost all the furnishings inside and outside the company. He also said that the company's visual identity also extended to Firstar Corporation’s advertising, promotional materials, exhibitions and all public image display (Melewar & Saunders, 2000).

2.3 Visual Identity Components and Hypotheses

This part described the specific content and characteristics of the eleven visual identity components. They are name, logotype/symbol, typography, colour, slogan,
uniform, printed material, equipment or facility, package, advertising and storefront. According to these components, we designed eleven hypotheses. Making hypotheses is a good way to make analysis be convenient. Meanwhile, reading and understanding of readers are easier, because there has many components. And these hypotheses would be answered in empirical finding section.

2.3.1 Name

Name is the key element of corporate identity. It is the most general way of communication for corporates and brands (Henderson et al, 1998). Tadelis (1999) presented that a name for a company could be easy to be distinguished in market. Name could convey reputation as an intangible asset. Josev, Chan and Faff (2004) researched influence of market by name changes, and used Australian corporates as their case study. They found that the benefits of changing name were more than costs of changing name (Josev et.al.,2004). The research proved brand’s name that make deeply influence in the market. Form of brand name could have many types. Print organization’s name on letterhead and promotional materials are important, because they can help people to remember the name. A short name will be easy to remember and signify (Rotary International.com, 2013, http://www.rotary.org/RIdocuments/en_pdf/547en.pdf).

Rotary International (2013) naming projects and programs also apply to the selection of Web site domain names. Web name is usually directly related to the organization’s name. McDonalds is a famous name in the world. Two brothers Richard James “Dick” McDonald and Maurice James “Mac” McDonald opened first McDonald’s restaurant in 1938 at California (Mcdonalds.com, 2013, http://www.aboutmcdonalds.com/mcd/our_company/mcdonalds_history_timeline.html). The name does not only represent a brand or corporate, but also stands for honor of a family. Therefore our first hypothesis is:

**H1:** Firms that using standardized visual identity view name as an effective way of improving their sales.
2.3.2 Logotype and/or symbol

Logotype is a major property, and companies need to spend a lot of time and money to popularize it. Logo has many forms, it can refer to all kind of graphic and typeface elements, ranging from word-driven through to image-driven (Henderson et al, 1998; Wheeler, 2003). Riel and Balmer (2007) thought that symbol has now been assigned a more important position. It was considered to have a communication function in the corporate identity, and its symbolic meaning is visible (Riel and Balmer, 2007).

In other hand, many scholars agree that a well-designed logo should be recognizable, have a positive effect, and allowing to transmit to sharing association (Machado et al, 2012). Logo design could be based on common physical environment or a widely accepted hobby (Veryzer, 1999). Figurative logos usually depict natural phenomena. Therefore, logo is a most notable visual element in extensive direct and indirect information tools (Henderson et al, 1998; Walsh et al, 2010).

In company's visual identity communications policy of Shell(2010), the Pecten is the symbol of the Shell brand. For general symbol, the Pecten should be in red and yellow, and always have the white keyline around it. For black and white ads, the symbol uses black Pecten with white keyline. Another example is Rotary International. Rotary emblem of Rotary International is one part of a graphic symbol. Correct rotary symbol as a recognizable corporate image, and also represent the public company's image. So the logo of rotary should never be changed or altered (Rotary International, 2013, http://www.rotary.org/RIdocuments/en_pdf/547en.pdf). Therefore our second hypothesis is:

H2: Firms using standardized visual identity view logotype or symbol as an effective way of improving their sales.

2.3.3 Typography

Typography design represents a personal and social characteristic in the same time. It sits at a crossroads of designer’s desire for identity and creativity. It demands and conventionalizes the moment shared by intended audience (Baker, 2012). In designing a print publication, corporates should not only think about the page design such as the
framework or skeleton, but also the type such as the finishing layers within that framework. The layout and typography of design decisions are important to the publication’s success (Rotary International, 2013, http://www.rotary.org/RIdocuments/en_pdf/547en.pdf). The simple layout includes: adequate margins and space between elements, dominate hierarchy, separated information, good typography, high-quality and well-cropped photographs. The corporate’s publications should be easy to read and easy to understand. Because customers will not read every words, therefore, they need several striking key words. It’s the way to save time and it is easier to find the information what they wanted (Rotary International, 2013, http://www.rotary.org/RIdocuments/en_pdf/547en.pdf).


H3: Firms using standardized visual identity view typography as an effective way to improving their sales.

2.3.4 Colour

Color could arouse mood and emotion, impact cognition and behavior of consumers, and help companies stand out from the competition (Aslam, 2006). Market research has shown that over 80% visual information is color (Colormatters.com, 2013, http://www.colormatters.com/color-and-marketing/color-and-trademarks). In other words,
color could convey information and provide some benefit of operation for customers. Importance of color as a part of visual identity has legal questions. Unique color of brand or corporate is protected by law (Colormatters.com, 2013, http://www.colormatters.com/color-and-marketing/color-and-trademarks). The importance of color could reflect in many ways. For example, choosing appropriate colors for advertisement, product packaging, and uniforms could enhance the possibility of success (Wild et al, 2012).

In Shell Group of Companies’ visual identity communications policy (2010), the color palette of Shell is made up of three colors palettes: Primary (yellow, red, white), Supporting (ten colors and tints) and Neutral (five colors and tints). The primary and supporting colors are used at 60%, 40% and 20% tints. Neutrals consist of 80%, 60% and 40% of black. ENQA has two main colors: dark and light blue. The light color is 30% tint of the dark color (ENQA. com, 2013, http://www.enqa.eu/files/ENQA_identityguide.pdf). Rotary of Rotary International colors are royal blue and gold or metallic gold (Rotary International, 2013, http://www.rotary.org/RIdocuments/en_pdf/547en.pdf). The colored emblem should appear on the official web, four-color publications, and other full color applications. If full color is not possible, the Rotary emblem will be printed in any single-color. It means that the emblem should never be printed in more than two colors. Therefore our fourth hypothesis is:

**H4:** Firms using standardized visual identity view colour as an effective way of improving their sales.

### 2.3.5 Slogan

Slogans are obvious maxim or sentence that using in business, politics or other areas. It enhances memory and achieves goals by constant repetition (Adslogans.co.uk, 2013, http://www.adslogans.co.uk/ans/creslo01.html). Slogans are usually used in publicity. McDonald’s slogan “I’m lovin’ it” is first time used for global campaign. It wanted to retain customers in all over the world and defined the brand positioning (Lexiophiles.com, 2013,http://www.lexiophiles.com/english/im-lovin-it-slogans-around-the-world). “Just do it” is a high-recognized slogan for Nike Shoes Company, which is the core constituent part of Nike Company (Seeklogo.com, 2013, http://www.seeklogo.com/nike-classic-logo-99493.html). This slogan was created in 1988 (Peters,
The slogan made the share of the domestic sport-shoe business from 18% to 43% (cfar.com, 2013, http://www.cfar.com/Documents/nikecmp.pdf). The slogan “Think different” of the Apple was created in 1997, which was designed by the Los Angeles office of advertising agency TBWA\Chiat\Day (Hornby, 2007). The slogan means that Apple came back as a marketing powerhouse (YouTube.com, 2010, http://www.youtube.com/watch?v=cFEarBzelBs). Therefore our fifth hypothesis is:

**H5:** Firms using standardized visual identity view slogan as an effective way of improving their sales.

### 2.3.6 Uniform

Uniforms are same or almost same clothes for organizational members to participate in activities (Pratt et al, 1997). In daily life, people need to wear uniform in many occasions. For example, students wear uniforms to go to school in some countries, and employees wear worker uniforms in some companies. The typical uniform is uniform of the military. Wearing uniform could make employees easier to identified (Peach State Button Club, 2010, http://www.buttoncountry.com).

In some companies, different departments have different uniforms. Therefore boss could find employee faster. On other hand, customers could find staffs easier when they need help. Because of the uniform is striking and distinctive (Peach State Button Club, 2010, http://www.buttoncountry.com). In McDonald's, uniform of every employee is unified. McDonald's employees have different uniforms in every season (Mcdonalds.com, 2013, http://www.aboutmcdonalds.com/mcd/our_company/mcdonalds_history_timeline.html). Whenever people see the McDonald's uniforms, they are naturally associated with the brand. McDonald's uniforms give employees a sense of belonging, and it is helpful for publicizing McDonald's brand actually (Mcdonalds.com, 2013, http://www.aboutmcdonalds.com/mcd/our_company/mcdonalds_history_timeline.html). Therefore our sixth hypothesis is:

**H6:** Firms using visual identity standardized uniforms as an effective way of improving their sales.
2.3.7 Printed materials


For the new content box of Shell Company, it’s a device for placing information such as copy, logos, etc. And it’s only allowed to place graphic in external communications. By the rule, the content box must use “Pecten” by primary lock-up (Shell.com, 2013, http://www.anabioil.com/shellviguidesm.pdf). The printed content box is used for spreading information of corporate, so the logo of the company is very important. The logo must be striking in visible location. Concurrently, the whole design of the box should be excellent, because it needs to attract the attention of visitors. Therefore our seventh hypothesis is:

**H7:** Firms using visual identity standardized view printed materials as an effective way of improving their sales.

2.3.8 Equipment or Facility

In the discussion of facilities management of visual identity, Lambert (1989) pointed out that the organization consciously or unconsciously disseminates the information on the business through enterprise “environment”, such as factories, offices and warehouses. Facility's forms are diverse, including buildings. Buckingham Palace is a good example. Facilities as a visual identity component include external facilities and internal facilities (Lambert, 1989). External facilities include gardens and roads, and internal facilities include furniture and even plants. The facility components affect the overall appearance and spatial planning. Facility also is part of the communication strategy, and it extends the traditional model of the marketing mix at the same time (Melewar and Saunders, 2000).

In McDonald's store, the facilities management is unified. They have a unified model,
and it is placed in position and spatial planning (McDonald.com, 2013, http://www.aboutmcdonalds.com/mcd/our_company/mcdonalds_history_timeline.html). In the office area, the facilities are also unified (McDonald.com, 2013, http://www.aboutmcdonalds.com/mcd/our_company/mcdonalds_history_timeline.html). This way does not only give consumers a sense of community, but also an infection with the employees. Therefore our eighth hypothesis is:

**H8:** Firms using visual identity standardized equipment/facility as an effective way of improving their sales.

### 2.3.9 Package

Package is an important shopping prop. Packaging is to shape the image of the product, as well as to attract consumers to buy products (Zhong and Yip, 2003). Good packaging design can help product sales. It has many types, common packaging materials are cloth, envelopes, inflatable packaging, cartons, plastic boxes, metal boxes, wooden boxes, etc. (Zhong and Yip, 2003). And the common decorative packaging materials are paper flowers, red envelopes, gift boxes, and gift seal (Zhong and Yip, 2003). Different packaging materials and decorative materials can collocate a wide variety of packages, and the lovely package has a function of attracting consumers. Package's major purpose is protecting the goods, especially use for some special products, like fresh goods.

Different packaging has different effects on products. For example Wine, the label design on the bottle is a packaging design, the wine boxes, bags and so on, are also packaging design (Zhong and Yip, 2003). Special point of packaging design is the three-dimensional structure of profession and creativity (Zhong and Yip, 2003).

Different packaging creativities and packaging designs embody the concept of a brand. For example, The Body Shop brand philosophy is natural (The Body Shop.com, 2013, http://www.thebodyshop-usa.com/index.aspx). The shopping bag of the body shop then uses environmental paper, and the pattern is green. This package design reflects the brand's philosophy. Therefore our ninth hypothesis is:

**H9:** Firms using standardized visual identity packaging as an effective way of improving their sales.
2.3.10 Advertising

Advertising is one of the most general ways of communication (Mayne, 2000). Advertising attracts customers as many as possible to propagandize and sell products, and it presents their products in as many ways as possible (Dyer, 1995). Advertising is everywhere, and it had been a part of people’s life (Mayne, 2000). Major of them appear on television, newspapers, and radio. Even if out of the door, people also can see advertising beside the streets, and they guides people to buy the products. Advertising “sells” products all day and every day (Mayne, 2000).

Adidas football shooting advertises for Messi. It attracts a lot of football fans (Adidas.com, 2013, http://www.adidas.se/football/Football,sv_SE,sc.html). In major football games such as World Cup or the European Cup, the best gift is team uniform for fans. Therefore our tenth hypothesis is:

**H10:** Firms using visual identity standardized advertising as an effective way of improving their sales.

2.3.11 Storefront

Storefront combines two components of exhibition design and exteriors (Cornelius, Natter and Faure, 2010). Storefront is not a separate entity, it is a collaborative process that integrating with architecture, landscape architecture, graphic design, digital media, audio engineering, lighting, interior design and content (Petrie, 2012). And the development of integrating is interpreting information as a spectator experience, including engages users and influences their understanding of a subject (Lee et al, 2010). Throughout the process of planning and design, exhibit designers’ work closely with graphic designers, content specialists, architects, manufacturers, technical experts, audiovisual specialists, and stakeholders (Petrie, 2012). Meanwhile, the stakeholders of store could be members of the community, government agencies and other partner organizations (Dernie, 2006). This is a blended component.

Starbucks stores’ design is made up of large transparent glass with comfortable sofas. Because the Starbucks wants guests feels comfortable when they meet their friends in the shop, and they could enjoy the most of time when they in the shop (Starbucks.com, 2013, http://www.starbucks.com.cn/en/about/mission-statement.html%5B). Therefore
our eleventh hypothesis is:

**H11:** Firms using visual identity standardized storefront of store as an effective way of improving their sales.

### 2.4 Discussion of Theoretical Framework

We create a new model to adapt to this thesis. This model is a theoretical framework of this thesis. The structure of the model has three levels. The first level is all visual identity components. Through an analysis method, we will find out these more important visual identity components for a company in the second level. The third level discusses how the components of the second level impact on the company's sales.

First of all, visual identity has 11 components that we have known from previous literatures and findings. When we set some limitation, such as in Swedish market and H&M brand, we maybe can find some important visual identity components. But these important visual identity components just suit for the H&M in Swedish market. Further, through some analysis tool, we can find out how these important visual identity components impact on the H&M sales. In the Methodology part, we will introduce how we will use the theory framework detailed.

![Figure 1. Theoretical Framework of visual identity components impact on sales](ownconstruction)
3 Methodology

This chapter is divided in eight parts. It presents the research agenda, that how the research and the theories are linked. And it shows the research strategy. Then it explains the research methods we chose and the collection of data. Next, it showed the data source of the Eviews analysis software and the process of Eviews analysis software. Finally we explained the validity and the reliability of the study and the way we analyzed the data.

3.1 Research Agenda

Conducting the research, theoretical model and research method are the main factors. These two elements are the basis for the entire study (Zikmund, 2012). To build the link between the research and the theory, there are two approaches: the deductive approach and the inductive approach (Zikmund, 2012). This thesis applied deductive method. For research topic, finding some relevant theories. Based on a central theme, to established theoretical framework for connecting multiple theories (Zikmund, 2012). Using the deductive approach to collect data. The collected data is analyzed to verify the validity of the results (Zikmund, 2012). The Figure 2 below shows the anchorage of the research agenda.

The Figure 2 below shows the anchorage of the research agenda. The anchored of the thesis agenda is the frame of the whole thesis. It can clearly determine the boundaries of the various parts of thesis. Firstly, we analyze the relative theories about visual identity. Literatures about visually identity are mainly regarded all components as one concept. Usually, visually identity is researched as a whole to. Visual identity contains multiple Visual identity components. However, the theory of these components has no relevance. Therefore, in order to achieve the purpose of this study, we have created a theoretical framework to connect these theories of visual identity components. Next, base on this theoretical framework, we have developed two research questions, in order to perform the purpose of this thesis. Then, we collect data by identified questionnaires and interview for consumers and employees. Data collection can link
theoretical framework and empirical research. Finally, we use empirical research analysis collected data to determine the results.

![Figure 2: The Anchorage of the Research Agenda (own construction)](image)

### 3.2 Research Strategy

To study the impact of visual identity on H&M sales, the thesis used three analytical methods, including qualitative research and quantitative research. In this paper, quantitative research included questionnaire for H&M's customers and Eviews analysis software, while qualitative research included interviews for the shop managers of H&M.

Study for the first research question, the thesis used interviews and we used questionnaires. We investigated consumer attitudes about all visual identity components through establish questionnaires. By analyzing the data obtained from the questionnaire, we could understand those components that consumer’s emphasis emphasized more. We went to the H&M stores for store visits and interviews. The aim was to find specific information on these visual identity components from their views. Though analyzing the collected data from questionnaires and interviews, we would find out those more important visual identity components for H&M.

Study for the second research question, we applied to the Eviews analysis software for these more important visual identity components and collect effective data. About the Eviews analysis software, this paper selected the unit root test, cointegration test and pairwise granger causality test to accurately analyze how these more important components impact on the H&M sales. Eventually we will get these components between H&M sales regression prediction equation. Eventually, we got a regression prediction equation about these components and H&M sales. This regression
prediction equation and other inspection results explained the relationship between these components and sales.

3.3 Research Methods: Qualitative Research

As Silverman (1999, p.8) states, "the methods used by qualitative researchers exemplify a common belief that they can provide a ‘deeper’ understanding of social phenomena than would be obtained by purely quantitative data”. Data collection of qualitative data usually involves interviews, observations and feelings. It is used to collect a wealth of material usually before established any formal hypothesis-forming stage (Hammersley, 1992). Qualitative research analyzes data from direct fieldwork observations, in-depth, open-ended interviews, and written documents (Patton, 2005). Rogers and Bouey (1996) point out that the most useful data collection method in qualitative research study is the interview.

In this qualitative study, we interviewed employees of H&M with open question. We hoped to find valuable information from their expression. This paper studied the impact of each of the major factors in the visual system. The most intuitive response about the impact of visual identity system on the company's performance was the feelings and experiences of employees and consumers. The validity of the visual recognition system depended on consumers' feeling about the brand image and brand awareness. Therefore, qualitative research was an effective and reliable method for research on visual identification system.

3.4 Research Methods: Quantitative Research

Quantitative data were any data that is in numerical form such as statistics, percentages, etc. (Given and Lisa, 2008). The use of quantitative methods could provide precise and tentative expression to qualitative change ideas. At the same time, the use of qualitative methods could collect intuitive feelings as qualitative data. Usually in an article the two methods can be combined (DiriwäCenter and Valsiner, 2006). The quantitative researcher asks a specific, narrow question and collected numerical data from participants through answers.

This thesis used a combination of qualitative and quantitative research method. First, we produced a questionnaire for data collecting. The questionnaire focused on the
various components of the visual identity. At the same time, we used the interview to collect qualitative data. Thereafter, we collected data for quantitative analysis and found out those components, which are relatively important visual identity components. Next, we used Eviews analysis software to analyze these more important visual identity components to H&M. We could know the importance of main visual identity components. In this way, we could make targeted recommendations for the future development of the company.

3.5 Data collection

In this section, the data collection process is explained in detail. It includes the structure of the questionnaire to the H&M's customers and structure of interviews to the H&M’s managers.

3.5.1 Structure of Questionnaires

This thesis developed the questionnaire focusing on various visual identity components, and the main target of the investigation is H&M’s consumer. From April 12th to 15th, we used four days to send questionnaires through mail or directly delivered to consumers. We sent 60 questionnaires to consumers by e-mail in April 12, 2013. Besides, we sent 60 questionnaires directly and collected questionnaire feedbacks in the center of Gävle. Deadline of collecting feedback questionnaire was April 15th. We received 112 questionnaires, but 9 of the questionnaires were invalid. Because of these questionnaires are uncompleted. We think the effective questionnaire should complete half of it at least. Therefore the total of valid questionnaires was 103.

Survey participants were H&M's consumers. In the first part of the questionnaire, we asked participants "Have you ever bought H&M's products?" We sent out 120 questionnaires totally, and have 112 feedbacks. Nine out of the 112 respondents said they haven’t bought any H&M's products. Therefore, these nine questionnaires were invalid. Therefore, we only used those 103 questionnaires for further analysis.

Among those the questions we asked, the first question and second question of questionnaire were the overall question. The first question was “Which is the best way of visual spread in H&M? What do you think?” This was to find out consumers’ overall attitude to the visual identity of H&M. It was a multiple-choice question. The
second question was "What do you think of the advantage and disadvantage of H&M logo?" It was to understand customers’ overall views about the advantage and disadvantage of H&M’s visual identity. It was also a multiple-choice question.

Question 3 to question 20 was all individual choice questions. Question 3 and Question 4 were about H&M brand name. We tried to find out whether H&M’s brand name has a strong impact on consumers. Question 5 and Question 6 were about H&M's Logo - to figure out whether H&M’s logo has any impact on consumers' purchasing decisions. Question 7 was to examine whether the typography of information on H&M’s poster has an impact on consumers. Question 8 was to understand the possible impact on consumers’ decision when color changes. Question 9 is to understand whether H&M’s slogan is helpful to consumer purchasing decisions. Question 10 and question 11 are trying to find out whether H&M’s uniform has any impact on H&M’s sales. Question 12 and question 13 were on H&M’s printed free publications. It was to examine whether printed free publications affect consumers’ purchasing decisions. Question 14 and question 15 designed to investigate whether the product packaging has impact on H&M's consumers. Question 16 and question 17 were to find out if location and the environment of H&M’s store affect consumers' purchasing decisions. Question 18 and question 19 were to investigate whether consumers are impacted by H&M's advertising. Question 20 is to find out whether consumer thinks equipment display of H&M is characteristic. Our questionnaire is attached as appendix A.

3.5.2 Structure of Interviews

Between April 16th and 17th, we visited 6 of H&M stores in Stockholm. On April 18th, we visited one H&M store in Uppsala. And on April 19th, we visited two H&M stores, one in Gävle and one in Valbo. The main target group of the interview is H&M's managers, and the main task of the interview is to get some important information on visual identity components. Unfortunately, only three store managers would like to be interviewed. They are the center store of Gävle, store of Valbo, and one of stores in Stockholm. All of interviewees were store managers. The manager’s name of Gävle is Joakim Olson. Manager of Valbo and manager of Stockholm did not allow writing their name on this thesis. We did face-to-face interviews in the store employees’ Office, and spent almost half an hour with each of the three managers.
The interview was divided into three parts. Firstly, we made a short presentation to the managers to why we wanted to interview them. Secondly, during the process of interview with three managers, we focused on six aspects of visual identity. The first aspect was about uniforms. We asked managers about H&M’s staff uniform and standard of clothing. The second part was about H&M magazine. We asked three managers for information on free magazine. The third part was on H&M product packaging. We asked the managers some questions focusing on type, number and effects. The fourth part was about advertising. We collected some information from three managers about H&M’s advertisings. The fifth was about storefront. The exhibition design of store is an important aspect of the H&M visual identity. The sixth part was about sales income. We tried to obtain three stores’ monthly sales from those three store managers.

Managers we interviewed indicated that they couldn’t answer questions on other components of visual identity, because they had no idea on those components. They also told us that some information we asked for were commercial secret, hence they have no right to disclose those information.

Information obtained from interviewing store managers was internal views on visual identity, while questionnaires is trying to obtain external views on H&M’s visual identity. This guarantees the authenticity and validity of the conclusions.

### 3.6 Analysis Method: Eviews Analysis Software

This section explained Eviews analysis software in great detail. It also showed the data source of Eviews analysis software and the process of Eviews analysis software.

#### 3.6.1 Eviews Analysis Software

Eviews means Econometrics Views. Eviews is often regarded as econometrics software packages. Its intention is to use econometric methods to observe the regularity of economic relations and economic activities (Wooldridge, 2010). Eviews is an indispensable tool in econometric studies. Eviews predictive analytic software is widely used in scientific data analysis, financial analysis, economic forecasts, sales forecasting and cost analysis (Wooldridge, 2010).
Eviews analysis software is mainly used in the analysis chapter of this paper. The Eviews software analysis in the thesis was base on the analyzing results of questionnaires and interviews. Through analyzing the results of the questionnaires and interviews, we could find out these more important visual identity components to H&M sales. This answers the first research question. Next, we used Eviews analysis software to analyze the specific quantitative relationship between these more important visual identity components and H&M sales.

The data used for Eviews, was H&M quarterly financial reports from 2006 to 2012 (H&M.com, 2013, http://about.hm.com/AboutSection/en/About.html). The company's quarter financial report covered most of the information about the company's annual operation, including the various surplus, expenditures, profits and sales in various markets, the investment projects, and the company's future development goals (H&M.com, 2013, http://about.hm.com/AboutSection/en/About.html). H&M's quarter financial report is the authoritative information for public announcement. In this thesis, the quantitative analysis requires for reliable data and H&M Company's quarter financial report was a reliable source of data. In addition, we chose the data in four quarters of the financial statements from 2006 to 2012 to analyze the impact of visual identify component on H&M sales. The publishing of H&M annual/quarter financial reports were timely, which ensures the reliability and validity of the data.

3.6.2 Process of Eviews analysis software

Eviews analytics software had various functions (Wooldridge, 2010). The main function applied in this thesis was Unit Root Test, Co-integration Test, Granger Causality Test and Regression Predicted Equation (Wooldridge, 2010).

First step was the original data preprocessing. Since the data we applied is quarterly data, it might present seasonal trends and fluctuate accordingly. To ensure the accuracy of Eviews analysis results, we need pre-processing the original data. In this paper, we used natural logarithm logarithmic conversion to process the original data. Logarithmic, irrational number e (e = 2.71828...) as base, called the natural logarithm, denoted as ‘logeN’, abbreviated as ‘lnN’ (Wooldridge, 2010). We used a natural logarithmic conversion processing to remove the fluctuations for all variables.

The second step was to run Unit Root Test. The unit root test is a variable stability test
(Wooldridge, 2010). During time series regression, if we allowed variables of the non-stationary time series data to go into the regression model, it could lead to spurious regression (Wooldridge, 2010). This means that although the regression variables did not have the regression relationship, they showed good regression relationship in the statistical sense. Most of economic variables were non-stationary, therefore we need do test for variables stability first. There were several of unit root test methods, including the ADF Test, PP Test, NP Test and others (Wooldridge, 2010). In this thesis, we selected Augmented Dickey-Fuller Test (ADF Test) for variables.

The third step was to run co-integration test and regression prediction equation, steady results of the data from Eviews analysis would be the basis for the third step If two or more time series were non-stationary, while some combination of them was steady, then cointegration relationship exists between these variables (Wooldridge, 2010). In this thesis, we used the Engel - Granger method to test the cointegration relationship between these variables. We need use one variable to do the regression analysis to the rest of the variables with the least squares method first, then run a stationary test of the residual error series. If the residual error series was steady, the cointegrated relationship between the variables existed. Otherwise, the co-integration relationship didn’t exist.

The fourth step was to run Granger causality test as a supplementary test. In addition to the Cointegration Test, we also need Granger Causality Test as a supplemental test. The Cointegration Test only indicates a long-term stable relationship between variables, it couldn’t indicate the direction of this relationship. In this paper, the Granger Causality Test method was to test the direction of the cointegration relationship (Wooldridge, 2010). Essentially, the Granger Causality Test was a test for a special case. It investigated whether the lagged variable of a variable could be introduced to the equation of the other variables (Wooldridge, 2010). If a variable was subjected to the lagged effect of other variables, then they had Granger causality test relations (Wooldridge, 2010).

Through Eviews analysis, we could finally know the specific quantitative relation between those important visual identity components and H&M's sales. This would also answer our second question on how those important visual identity components affect H&M's sales.
3.7 Data Analysis Method

All studies of this thesis are based on this theoretical framework (Figure 1). At first, we have collected all visual identity components by relevant literature. After that, we designed the questionnaire base on these components. The questionnaire is to find the impact of visual identity components on H&M’s sales from customer’s perspective. At same time, we interviewed three managers in H&M stores to obtain some information from employees’ perspective. After analysis of questionnaires and interviews, we would find out a few more important visual identity components that have greater impact on the H&M sales. Further, we found secondary data in H&M quarter financial reports, and put these secondary data into Eviews analysis software. Finally, through by accurate calculations, we found how these more important visual identity components impact on H&M sales.

Data analysis of this paper is divided into three parts. The main tools of quantitative data analysis were Eviews analysis software and Microsoft Excel. Quantitative data collected through questionnaires used Microsoft Excel for analysis. Qualitative data collected through interviews used inductive analysis. Then, according to the previous preliminary results of the first two analyses, we run further analysis through Eviews.

The first step was questionnaire data analysis. We used Microsoft Excel to analyze questionnaire feedback. The 20 questions cover 13 areas. The analysis result gave us percentage of each choice/answer. We would then understand consumers’ attitude to H&M’s visual identity, hence, understand the impact of those visual identity on H&M’s sale.

The second step was interview data analysis. Interview data involved six aspects. To the analysis of the interview data, we identified those that most of the managers mentioned. The result of this preliminary analysis is basis for our next step in-depth analysis.

The third part is Eviews software analysis. From the previous analysis, we can find out that some of the visual identity components have greater impact on H&M’s sales revenue. We then firstly test the stationary for the data sequences, i.e. the unit root test. In this step, we would get the data stationary condition. Secondly, these data’s co-integration must be tested, i.e. co-integration test. In this step, we would get the
regression equation between these variables. We then have to test the lagged effect of variables, i.e. Granger causality test. In this step, we would get the direction of influence between the variables. Eviews analysis is an in-depth analysis, and we would finally find the mathematical relationship between those important visual identity components and H&M sales, i.e. the regression equation.

### 3.8 Reliability and Validity

The primary data of this thesis was collected by questionnaires and storefronts interview. We took field visits of H&M stores to collected data. This ensured that the data is validity. At the same time, we sent 120 questionnaires to safeguard the adequacy of the data feedback. On the other hand, we chose H&M Company's quarter financial report as data source of the Eviews software. It was a validity source of data.

We used the data of H&M’s quarter financial reports into Eviews analysis software. Through calculation and validation, finally we obtained the detailed influential quantitative relationship between visual identity components and sales. By comparing these values, we could get the most important component of effect on sales. Eviews is authoritative analysis software. The program carried out the results of calculation, that means the process did not need a lot of manual operation thereby avoiding mistakes of result. So the result of Eviews had greatly reliability.
4. Empirical Findings

This chapter discusses empirical findings. It mainly included three aspects. The first is the introduction about the brand case--H&M. The second aspect is the questionnaire data. We summarized the information collected through the questionnaire. This quantitative data was consumer’s attitudes for H&M visual identity components. The third aspect was the interview data. We summarized the data collected from interviews with managers. This qualitative data was about managers’ attitudes for H&M visual identity components.

4.1 The Case Brand---H&M

H&M is a Swedish fashion company. H&M’s full-call name is Hennes & Mauritz AB. The company has six different independent brands: H&M, COS, Monki, Weekday, Cheap Monday, and other stories (H&M.com, 2013, http://about.hm.com/AboutSection/en/About.html).


4.2 Quantitative Findings: Questionnaires

We designed questionnaires for H&M’s customers. Finally, there were 103 valid questionnaires. We used these questionnaires to do statistical analysis, and then we got the following data.

The best way of visual spread in H&M

The question 1 was a recapitulative question, and it totally had eight options. The respondents directly chose the best way of visual spread by their self. The first three popular choices were: Brand logo (37.86%); advertising (27.18%); and exhibition design (22.33%). Brand logo was “H&M” in common. Advertising could be TV ads or print ads etc. Exhibition design included store area, store decoration, etc. Printed publication could be magazines, activity brochures, or description of membership cards, etc. Image of staff was uniforms. Brand slogan was a vocal sign for brand. Product packaging included plastic bags, and wrapping paper, etc. Office environment was official business room’s environment, such as rest room in staff lounge and staff working room, etc. This question was the most important one in all of questions.

Question 1: Which is the best way of visual spread in H&M? What do you think?

<table>
<thead>
<tr>
<th>Options</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Advertising</td>
<td>28</td>
<td>27.18%</td>
</tr>
<tr>
<td>B. Printed publication</td>
<td>5</td>
<td>4.85%</td>
</tr>
<tr>
<td>C. Exhibition design</td>
<td>23</td>
<td>22.33%</td>
</tr>
<tr>
<td>D. Brand logo</td>
<td>39</td>
<td>37.86%</td>
</tr>
<tr>
<td>E. Image of staff</td>
<td>3</td>
<td>2.91%</td>
</tr>
<tr>
<td>F. Office environment</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>G. Product packaging</td>
<td>2</td>
<td>1.94%</td>
</tr>
<tr>
<td>H. Brand slogan</td>
<td>3</td>
<td>2.91%</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1. Question 1 and result (own construction)
Advantage and disadvantage of H&M logo

This question was to survey about H&M brand Logo. 67.96% of respondents thought that the Logo was easy to remember. And 50.49% of respondents thought that it’s an eye-catching logo. Coincidentally, four options were getting same number of votes, including one advantage (Bright colors) and three disadvantages (Visual impact is not enough, personalized (peculiarity) is scarce, and visual artistry is not strong).

Question 2: What do you think of the advantage and disadvantage of H&M logo?

<table>
<thead>
<tr>
<th>Options</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The name is easy to remember</td>
<td>70</td>
<td>67.96%</td>
</tr>
<tr>
<td>B. Bright colors</td>
<td>30</td>
<td>29.13%</td>
</tr>
<tr>
<td>C. Eye-catching logo</td>
<td>52</td>
<td>50.49%</td>
</tr>
<tr>
<td>D. Modern sense is not strong</td>
<td>5</td>
<td>4.85%</td>
</tr>
<tr>
<td>E. Visual impact is not enough</td>
<td>30</td>
<td>29.13%</td>
</tr>
<tr>
<td>F. Personalized (peculiarity) is scarce</td>
<td>30</td>
<td>29.13%</td>
</tr>
<tr>
<td>G. Visual artistry is not strong</td>
<td>30</td>
<td>29.13%</td>
</tr>
</tbody>
</table>

Table 2. Question 2 and result (own construction)

Name

The question 3 and question 4 had the same theme--to find out the impact of brand from H&M branding name. For question 3, 71.84% of respondents came back with positive answer that H&M branding name was impressive, but 28.16% of respondents thought it wasn’t. 48.54% of the respondents chose that H&M branding name increased their buying inclination. But 51.46% of respondents were apathetic when they heard the name.

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Is H&amp;M branding name impress you?</td>
<td>A Yes</td>
<td>74</td>
<td>71.84%</td>
</tr>
<tr>
<td></td>
<td>B No</td>
<td>29</td>
<td>28.16%</td>
</tr>
<tr>
<td>4. Does H&amp;M’s branding name affect purchase</td>
<td>A Yes</td>
<td>50</td>
<td>48.54%</td>
</tr>
<tr>
<td>decision for you?</td>
<td>B No</td>
<td>53</td>
<td>51.46%</td>
</tr>
</tbody>
</table>

Table 3. Question 3-4 and result (own construction)
**Logotype**

Question 5 and question 6 were questions about the logo. The 52.43% of respondents thought the H&M’s logo was in high degree of resolution, and 44.66% of respondents chose the general degree for resolution of logo.

View of the logo, the most popular answer was “easy to remember” (66.02%), and this result was the same as question 2. And 17.48% of respondents thought that H&M’s logo was an international logo. The relatively less popular answers were “high popularity” (9.71%) and “new and unique” (6.8%).

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. How do you think the degree of recognition about H&amp;M Logo?</td>
<td>A. High degree</td>
<td>54</td>
<td>52.43%</td>
</tr>
<tr>
<td></td>
<td>B. General degree</td>
<td>46</td>
<td>44.66%</td>
</tr>
<tr>
<td></td>
<td>C. Low degree</td>
<td>3</td>
<td>2.91%</td>
</tr>
<tr>
<td>6. As a consumer, how do you think about the H&amp;M Logo?</td>
<td>A. New and unique</td>
<td>7</td>
<td>6.8%</td>
</tr>
<tr>
<td></td>
<td>B. It's easy to remember</td>
<td>68</td>
<td>66.02%</td>
</tr>
<tr>
<td></td>
<td>C. High popularity</td>
<td>10</td>
<td>9.71%</td>
</tr>
<tr>
<td></td>
<td>D. Internationalization</td>
<td>18</td>
<td>17.48%</td>
</tr>
</tbody>
</table>

Table 4. Question 5-6 and result *(own construction)*

**Typography, Colour, Slogan, and Facility**

Question 7 was inquiry on typography of important information. The 57% of respondents believed that correct setting of important information has positive effect for branding publication. And 37.86% of respondents thought that the typography was influential but not very important. A small number of respondents (4.85%) thought that it’s unimportant.

Question 8 was survey about color. If color of H&M’s logo was changed, most of the respondents thought that they would be affected, but not in a very serious way. And 27.18% of respondents expressed that they would not care at all. Only 9.71% of respondents indicated that they would care about the logo color very much.

Question 9 was investigated on H&M’s slogan. Most of the respondents didn’t know the slogan of H&M. Only 9.71% of respondents knew the slogan. And the slogan was “Fashion and quality at the best price”.

Question 10 was inspecting about layout of facilities. 40.78% of respondents thought the layout (such as placement of shelves or distribution of facilities in store, etc.) were
characteristic, but 59.22% of respondents thought the display facilities were ordinary and were not distinctive.

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Do you think that material information (like Logo) of type setting are important for H&amp;M branding’s publicity on posters?</td>
<td>A. Important</td>
<td>59</td>
<td>57.28%</td>
</tr>
<tr>
<td></td>
<td>B. Common</td>
<td>39</td>
<td>37.86%</td>
</tr>
<tr>
<td></td>
<td>C. Unimportant</td>
<td>5</td>
<td>4.85%</td>
</tr>
<tr>
<td>8. If H&amp;M Logo changes color collocation, would you care about it?</td>
<td>A. Completely not</td>
<td>28</td>
<td>27.18%</td>
</tr>
<tr>
<td></td>
<td>B. Some influence</td>
<td>65</td>
<td>63.11%</td>
</tr>
<tr>
<td></td>
<td>C. Care about it greatly</td>
<td>10</td>
<td>9.71%</td>
</tr>
<tr>
<td>9. Do you know the slogan of H&amp;M?</td>
<td>A Yes</td>
<td>10</td>
<td>9.71%</td>
</tr>
<tr>
<td></td>
<td>B No</td>
<td>93</td>
<td>90.29%</td>
</tr>
<tr>
<td>10. What do you think about the display facilities? Are they characteristic?</td>
<td>A. Yes</td>
<td>42</td>
<td>40.78%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>61</td>
<td>59.22%</td>
</tr>
</tbody>
</table>

Table 5. Question 7-10 and result (own construction)

Uniforms

The survey of question 11 and question 12 was on uniforms. Most respondents (61.17%) expressed that they don’t pay attention to the unified uniforms of staff. 22.33% of respondents said H&M has unified uniform, but the 16.5% of respondents said H&M not has it.

On the necessity of unified uniforms, the 82.52% of respondents believed that H&M should have unified uniform, because the uniforms made staff easier to identity. The rest of respondents (17.48%) thought the uniforms were not necessary.

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Did you notice the H&amp;M unified staff uniforms?</td>
<td>A. Yes</td>
<td>23</td>
<td>22.33%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>17</td>
<td>16.5%</td>
</tr>
<tr>
<td></td>
<td>C. Never care about it.</td>
<td>63</td>
<td>61.17%</td>
</tr>
<tr>
<td>12. Do you think it’s necessary that employees should have unified uniforms?</td>
<td>A. Yes</td>
<td>85</td>
<td>82.52%</td>
</tr>
<tr>
<td></td>
<td>A. Unnecessary</td>
<td>18</td>
<td>17.48%</td>
</tr>
</tbody>
</table>

Table 6. Question 11-12 and result (own construction)
Printed materials

Free publications included free magazines, promotional brochure, handbook of activities, and report of product composition, etc. There were only 24.27% of respondents expressed that they had read the free publications in question 13. Most of respondents (75.73%) said they had never read them before.

For question 14, free publications only had positive impact on 27.18% of respondents. In other words, 72.82% of respondents believed that free publication had not influence on them.

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Did you read free publications of H&amp;M?</td>
<td>A. Yes</td>
<td>25</td>
<td>24.27%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>78</td>
<td>75.73%</td>
</tr>
<tr>
<td>14. Did you ever want to buy H&amp;M products by reading the H&amp;M’s free publications?</td>
<td>A. Yes</td>
<td>28</td>
<td>27.18%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>75</td>
<td>72.82%</td>
</tr>
</tbody>
</table>

Table 7. Question 13-14 and result (own construction)

Packaging

Question 15 and question 16 were questions on packaging. More then half of the respondents (56.31%) thought that H&M’s packaging bags were distinctive. And 43.69% of respondents believed that packaging was just packaging, so it’s not the characteristics of the brand.

70.87% of respondents agree that packaging could be used as a part of the branding, but there were still 29.13% of respondents believed that packaging didn’t have any affect on the branding publicity.

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<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Is H&amp;M packaging bag characteristic for you?</td>
<td>A. Yes</td>
<td>58</td>
<td>56.31%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>45</td>
<td>43.69%</td>
</tr>
<tr>
<td>16. Do you think that packaging is an important part of the H&amp;M brand publicity?</td>
<td>A. Yes</td>
<td>73</td>
<td>70.87%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>30</td>
<td>29.13%</td>
</tr>
</tbody>
</table>

Table 8. Question 15-16 and result (own construction)
**Storefront**

Question 17 and question 18 were surveyed on store information. Most respondents thought the location of H&M's store was striking. Usually the store building located in centrally business circles, and it was easy to find. Only 9.71% of respondents felt bad for the locations of H&M stores.

Most of respondents (76.7%) thought the environment of H&M stores were comfortable, and enjoyed the integration of the whole shopping process. 23.3% of respondents did not feel so good when they shopped in H&M stores.

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<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. How do you think the seating position of H&amp;M stores?</td>
<td>A. Conspicuously, it’s easy to find.</td>
<td>93</td>
<td>90.29%</td>
</tr>
<tr>
<td></td>
<td>B. It’s undetectable.</td>
<td>10</td>
<td>9.71%</td>
</tr>
<tr>
<td>18. Do you enjoy the whole shopping process in H&amp;M store’s environment?</td>
<td>A. Yes</td>
<td>79</td>
<td>76.7%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>24</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

Table 9. Question 17-18 and result (own construction)

**Advertising**

Advertising included TV commercials, print ads, radio ads, etc. Impact of H&M’s advertising was the purpose on question 19 and question 20. The result showed that advertising attracted 66.02% of respondents. The rest of respondents (33.98%) believed that the advertising has no attraction for them. Some respondents even said they didn’t notice H&M’s advertising at all.

Advertising affected 70.87% of respondents’ purchasing decision, but there were still 29.13% of respondents’ purchasing decision was not influenced by advertising.

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Is the advertising (TV commercial, Print ads, etc.) of H&amp;M attractive for you?</td>
<td>A. Yes</td>
<td>68</td>
<td>66.02%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>35</td>
<td>33.98%</td>
</tr>
<tr>
<td>20. Does H&amp;M advertising affect you purchase decision?</td>
<td>A. Yes</td>
<td>73</td>
<td>70.87%</td>
</tr>
<tr>
<td></td>
<td>B. No</td>
<td>30</td>
<td>29.13%</td>
</tr>
</tbody>
</table>

Table 10. Question 19-20 and result (own construction)
4.3 Qualitative Findings: Interviews

Combined with questionnaires for H&M consumers, we found some relatively important components of visual identity for H&M. Focusing on these relatively important components of visual identity, we interviewed H&M store’s managers. On April 16th, 17th, 18th and 19th, we interviewed three managers of the H&M’s stores in Gävle, Valbo and Stockholm. Joakim Olson is the manager of Gävle Center’s H&M store, another managers are from Valbo’s H&M store and Stockholm’s H&M store. Interview questions focused on the following aspects: staff uniforms, printed material (magazines), H&M product packaging, advertising, H&M stores and shops monthly sales

Uniform and Clothing Standard of H&M

Joakim Olson had his own interpretation on this issue. Their store had no staff uniform. Because their staff works very hard every day, therefore they are free to wear some comfortable clothes and shoes that they want. Head offices also don’t have staff uniform. However, in some special day, like anniversary or any other holidays, the head office will give each employee the same T-shirt to wear - T-shirt printed with words, like “Welcome to H&M”. But in the normal working hours, employees don't have the uniform to wear. Regarding to the dress standards, they encourage employees to wear H&M clothing.

Manager of Valbo said workers in the store had no uniform. The employees can dress freely. As for the standard, it is the spirit of the employees. Every employee of the shop wears a pattern stamp “H&M” during their working hours. This is the logo of our employees.

The manager of Stockholm’s H&M store believed that all of H&M stores did not have staff uniform. He also thought that staff uniforms would have some help on the H&M brand publicity, but the cost of the staff uniforms would also be counted. Their employees can wear H&M clothing as their uniform. This also had the effect of publicity.
Information on H&M Magazine

Joakim Olson explained that H&M published their own magazine. It introduces H&M's new clothing on the season and its price. H&M magazine publishes four editions each year: There is Spring Edition, Summer Edition, Autumn Edition and Winter Edition. The magazine's size is 29cm x 22.5cm. For Gävle Center store, head office distributes 2000 magazines to their store every quarter. However, the actual distribution situation in the store is not satisfied. Many customers have no interest in the magazine. Customers would not take any of the magazines unless the staff asked them to do so.

Manager of Valbo told us that the head office distributed H&M magazines. The quality of H&M’s magazine is good. Because they believe that the quality of the magazine indirectly reflects the level of products’ quality. Perhaps the cost of this free magazine is high, but this kind of investment brings certain return. When customers read this high-quality magazine, they then regard H&M as a fashionable and high-quality brand. And then, the sales would be increased.

The manager of H&M store in Stockholm, He said that due to the large flow of people in Stockholm, the number of magazine in their store was 3000 copies each quarter. The situation of each store in Stockholm is basically the same. As a local brand in Sweden, the magazine of H&M has a certain degree of influence on their customers. Therefore, the head office’s investment on this aspect is also valuable.

Product Packaging of H&M

Joakim Olson summarized the H&M packaging bags. They have four kinds of packaging bags for adults and two kinds of packaging bags for children. So there are six kinds of packaging bags totally. On special holiday, such as Christmas, they will have some special packing bags provided to the consumers. If a customer purchases the product as a gift, they also provide some special gift packing. Of course, this is only on some special time. In general, their store can consume about 500 packing bags in one week.

Manager of Valbo told us that their shop could consume 400-500 packing bags in one week. At different times, they change the design style of the packing bags. These are
decisions made by the head office for all stores. Regarding to the effect of packaging bags, he thinks the design of the packaging bags also publicized the brand.

The manager of Stockholm’s H&M store explained that the design of H&M’s packaging bags was unique and easy to identity, because the H&M’s logo on the bags is designed to be eye-catching. It also shows the popular patterns of H&M. When consumers are holding H&M packaging bags while they are shopping, it has become a very special form of publicity.

Advertising of H&M

Joakim Olson explained that H&M’s ads included video ads, printed ads and other forms. Their stores can only have printed ads (posters). In this store, the total number of billboards is about 50 in this quarter. Of course, the number of quarterly billboard is not the same, and they are the requirements from head office. These billboards are provided by head office. When customers walk into the store, they can find these ads everywhere. Advertising is an important means of promotion for H&M. However, he doesn’t know the advertising investment quota of each quarter.

Manager of Valbo calculated the number of posters: totally, they had about 46 advertising signs in their shop. H&M video ads don’t often appear in television. This advertising signs become a very effective way of publicity for H&M. Many consumers know H&M new clothing from this channel.

The manager of H&M store in Stockholm believed that advertising was a very fast and effective way of H&M publicity. Their store’s area is larger, so there has about 60 advertising logos in the store. H&M Company pays more attention to intangible fixed assets investment annually, and advertising is the most important part of that. Most of the intangible fixed assets are advertising cost. Furthermore, the company's sales also are changes along side with the change of advertising investment.

The Exhibition Design of H&M Store

Joakim Olson told us that their storefront was located in the center of Gävle. It was easy to find. The head office standardized their store design style. Customers can discover that every H&M stores are designed in a relatively similar way. This is also a good way to publicize the brand. They believe that the store design and location have an impact on sales.
Manager of Valbo’s store described that their storefront was located in the commercial center of Valbo, next to IKEA. The rent of the shop is relatively high. He does not know the specific number. As far as he knows, most of H&M's storefronts are located in the heart of a city. Although the cost will be higher, it brings the growth in sales in a great way.

The manager of H&M store in Stockholm said that their storefront is located in the center of Stockholm. The total number of H&M stores is six in the center of Stockholm. Their storefront has a relatively large area. H&M is a Swedish representative brand. Therefore, people can see the H&M stores everywhere in the center of Stockholm. H&M store design style is simple and bright, and to show consumers the Nordic fashion culture. The storefront affects the image of the product in the minds of consumers greatly.

**The Monthly Sales from H&M Stores**

Joakim Olson, the manager of H&M store in Valbo and the manager of H&M store in Stockholm, they all claimed that the monthly sales of each store is the company's secret. So they could not tell us, but they suggested that maybe we could find some information on financial report.
5. Analysis

This chapter is the analysis. Firstly, we reflected the empirical finding. Secondly, we analyzed the eleven hypotheses proposed previously related to the theory, based on the results of questionnaires and interviews. And we got the corresponding eleven conclusions. From this part of the results, we can obtain these more important visual identity components for H&M. Thirdly, we did the Eviews software analysis for these important components, based on the data from H&M financial reports. Finally, we found out how these important visual identity components impact on the H&M's sales.

5.1 Reflection of Empirical Finding

Empirical finding mainly included three parts. The first part introduced the case of H&M brand's information. The second part explained the questionnaires finding. We sent out questionnaires to H&M consumer, and collected feedback data and the ratio of each option. This information clearly showed attitudes and perspectives of consumer for each visual identity component. The third part explained the interview findings. Our interviews focused on H&M managers, and collected feedback of interview questions. This information clear showed attitudes and perspectives of the H&M store managers for each visual identity component. With empirical research findings as a basis, we would analyze the significance of these empirical findings and conducted deeper quantitative analysis.

5.2 Analysis of Hypothesis

We analyzed the previous hypothesis by finding of questionnaires and interviews. And after analysis, we would answer the research question 1.

H1: Firms using standardized visual identity view name as an effective way of improving their sales.

The branding name was the important representative of a brand. For consumers, the branding name is one of the starting points of knowing and remembering a brand. 71.84% of respondents believed that the name of H&M is impressed based on question 3. H&M's name was simple and easy to remember, and this is also an
advantage of the brand. But in question 4, it showed that less than half of respondents recognized that the name influences their purchasing decisions. That is to say, name does not have a significant impact of improvement on the H&M sales. According to the analysis for H&M, we drew our conclusion base on the H1.

*C1:* Name, as one of the components in the visual identity, has a general degree of influence on H&M sales.

**H2:** Firms using standardized visual identity view logotype or symbol as an effective way of improving their sales.

Logotype or symbol is the direct image of a brand. It is equally important to brand name as a starting point to knowing and remembering a brand. Logo is a store’s visual sign that tells their existence to customers. In the shopping process, customers decide to buy the products after they see the branding sign. As question 2, 67.96% respondents chose “easy to member”, and “eye-catching” was 50.49%. In another words, H&M’s logo is easy to identify among other brand. Although question 5 and question 6 showed that H&M’s logo was personalization and artistic, it had high degree of recognition, and the color was bright. Hence it could sufficiently attract consumers' attention. Only when H&M stores could be easily found, customers might buy H&M’s products. According to the analysis for H&M, we drew our conclusion base on the H2.

*C2:* Logotype or symbol, as one of the components in the visual identity, has a high degree of influence on H&M sales.

**H3:** Firms using standardized visual identity view typography as an effective way of improving their sales.

According to the responses for question 7, 57.28% of respondents believed that the typography was important information. It was mainly used in publicity. Some of respondents said that the typography of the logo or slogan could make consumers to understand the brand information easily, such as what brand was for. The typography played a positive role of publicity, but not on H&M’s sales. According to the analysis for H&M, we drew our conclusion base on the H3.

*C3:* Typography, as one of the components in the visual identity, has a general degree of influence on H&M sales.
**H4: Firms using standardized visual identity view colour as an effective way of improving their sales.**

The color that represents H&M the most is red. Therefore the most common trademark is the red logo. In answering question 8, 63.11% of respondents felt that changing of the logo’s color had some impact on them, but the influence was not obvious. Respondents said changing H&M logo’s color would have some impact on their visual identity, because they would not be used to it. But this would not affect their purchasing decision, because H&M still was H&M, the product and design had not changed. According to the analysis for H&M, we drew our conclusion base on the H4.

*C4: Colour, as one of the components in the visual identity, has a low degree of influence on H&M sales.*

**H5: Firms using standardized visual identity view slogan as an effective way of improving their sales.**

The results of the question 9 showed that 90.29% of respondents didn’t know H&M’s slogan. When we distributed our questionnaires, small number of respondents who knew the slogan could hardly repeat the slogan completely. However, H&M slogan was obvious on the H&M official website, and appeared in many promotions, but a lot of people didn’t pay attention to it. So, the H&M slogan didn’t has much effect on publicity, not to mention sales. According to the analysis for H&M, we drew our conclusion base on the H5.

*C5: Slogan, as one of the components in the visual identity, has a low degree of influence on H&M sales.*

**H6: Firms using standardized visual identity view uniforms as an effective way of improving their sales.**

Uniform is the identification of the store employees. The results of question 11 showed that 61.17% of the respondents didn’t pay attention to the staff uniforms. This showed that the uniform is not important or not a concern in customers’ eyes. 22.33% of the respondents said that H&M had uniforms. However, 16.17% of the respondents said that H&M had no uniforms. This showed that status quo of H&M staff’s
uniforms make consumers confused. In the interview, store's managers said that they did not have standard uniform. It again showed that uniform makes error on consumers confused. According to results of question 12, 82.52% of the respondents thought that H&M should have unified uniforms. Some of the respondents mentioned that uniforms could help them to find staff on the store floor easily. But this didn’t stop them buying products. According to the analysis for H&M, we drew our conclusion base on the $H_6$.

$C_6$: Uniforms, as one of the components in the visual identity, has a low degree of influence on H&M sales.

$H_7$: Firms using standardized visual identity view printed material as an effective way of improving their sales.

The printed material is one of the ways of product publicity. The H&M Magazine is the leading brochure of publicity in all of printed materials. But the feedback from customers was not good. Through our interviews, we learned that H&M spent a big amount of money on H&M magazine, the magazine’s quality was an evidence of its cost. At the same time, the number of free magazines was limited. And many customers did not take it away. The result of question 13 showed that 75.73% of respondents had not read any free publications. It explained that the cognition degree of printed material is not high, According to feedbacks of question 14, 27.18% of respondents wanted buy H&M products after reading the free publications, although only 24.27% of respondents had read free publications. We could interpret that 3% of respondents at least who looking forward to reading free publications. Nevertheless, the impact of printed material on sales was small. According to the analysis for H&M, we drew our conclusion base on the $H_7$.

$C_7$: Printed material, as one of the components in the visual identity, has a general degree of influence on H&M sales.

$H_8$: Firms using standardized visual identity view equipment as an effective way of improving their sales.

Facilities were not a obvious important factor in the shopping process. Investigation of question 10 for display facilities, 59.22% of the respondents thought that facilities
were not characteristic. In other words, the display facilities were not attractive. Although, the display facility as a component in the visual identities was not easy to find, they could demonstrate the details. Some respondents said that the display facilities would not affect their purchasing decisions. They would not be impressed by these facilities or they would not fell comfortable with those facilities. Therefore, H&M did not do well on display facilities. According to the analysis for H&M, we drew our conclusion base on the \( H8 \).

\( C8 \): Equipment, as one of the components in the visual identity, has a low degree of influence on H&M sales.

\( H9 \): Firms using standardized visual identity view packaging as an effective way of improving their sales.

Every store should have packaging. According to the interviews, H&M packaging was standardized and unique. The style of packaging would be changed only on the special days. The results of question 15 showed that 56.31\% of the respondents thought that H&M packaging was characteristic. In other words, H&M’s packaging had unique and clear characteristics, but not innovative. A manager said that the H&M packaging was a special way of publicity, because H&M logo on packaging was very eye-catching. The results of the question16 also showed that 70.87\% of the respondents thought that the packaging has important function. Therefore packaging is helpful for publicity, but the characteristic was not enough. According to the analysis for H&M, we drew our conclusion base on the \( H9 \).

\( C9 \): Packaging, as one of the components in the visual identity, has a general degree of influence on H&M sales.

\( H10 \): Firms using standardized visual identity view advertising as an effective way of improving their sales.

According to the results of question19 and question 20, 66.02\% of respondents thought that H&M’s advertising was attractive, and 70.87\% of the respondents admitted that advertising impacted their purchasing decisions. From the customers’ point of view, H&M’s advertising plays a positive role, especially in making their purchase decision. In the interviews, store manager Joakim Olson and the manager of Valbo’s H&M also mentioned that advertising was an important element of branding. In addition, H&M
Company invested heavily in advertising, they believed that advertising could increase through sufficient. Thus, advertising does not only attracted consumers but also increased sales. According to the analysis for H&M, we drew our conclusion base on the \textit{H10}.

\textbf{C10:} Advertising, as one of the components in the visual identity, has a high degree of influence on H&M sales.

\textbf{H11: Firms using standardized visual identity view storefront as an effective way of improving their sales}

Storefront includes two parts -- exhibition design and exteriors. According to the result of question 17, 90.29\% of the respondents thought that H&M stores’ location was eye-catching. This result showed that consumers could easily find H&M stores. At the same time, the results of question 18 indicated that 76.7\% of the respondents enjoyed the shopping environment in H&M stores. In other words, the appearance and style of the stores have a positive effect on consumer psychology. Through by interviews, we learned that most H&M stores located in significant location in city center. Although the rent of central location was more expensive, H&M Company believed that a good location could bring better income. H&M stores’ decoration styles were simple--Scandinavian styles. Stores were also regularly refurbished in order to keep the best image. This means that H&M Company uses high standard for their stores, and taking their stores seriously. As everyone knows, store income is the major channel of revenue of H&M Company. Therefore, the importance of the storefront is huge. According to the analysis for H&M, we drew our conclusion base on the \textit{H11}.

\textbf{C11:} Storefront, as one of the components in the visual identity, has a high degree of influence on H&M sales.

After the analysis of all hypotheses, we had reached some conclusions. As showed in Table 11, the four columns are the number of the hypothesis, the component of hypothesis, the conclusion after analysis, and the degree of influence.

Through the Table 11, we could clearly see that the degree of influence of each hypothesis. There are three hypotheses of high degree of influence. These components
are logotype/symbol, advertising, and storefront. There were four hypotheses that have general degree. These components are name, typography, printed material, and packaging. Four hypotheses of low degree influence are color, slogan, uniform, and equipment / facility. Next, we would use Eviews to analyze those three components, which have high degree of influence.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Component</th>
<th>Conclusion</th>
<th>Degree of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Name</td>
<td>Conclusion 1</td>
<td>General degree</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>Logotype/symbol</td>
<td>Conclusion 2</td>
<td>High degree</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>Typography</td>
<td>Conclusion 3</td>
<td>General degree</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>Colour</td>
<td>Conclusion 4</td>
<td>Low degree</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>Slogan</td>
<td>Conclusion 5</td>
<td>Low degree</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>Uniform</td>
<td>Conclusion 6</td>
<td>Low degree</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>Printed material</td>
<td>Conclusion 7</td>
<td>General degree</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>Equipment/facility</td>
<td>Conclusion 8</td>
<td>Low degree</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>Packaging</td>
<td>Conclusion 9</td>
<td>General degree</td>
</tr>
<tr>
<td>Hypothesis 10</td>
<td>Advertising</td>
<td>Conclusion 10</td>
<td>High degree</td>
</tr>
<tr>
<td>Hypothesis 11</td>
<td>Storefront</td>
<td>Conclusion 11</td>
<td>High degree</td>
</tr>
</tbody>
</table>

Table 11. Conclusion of Hypothesis about visual identity components

(own construction)

5.3 Analysis of Eviews software

From our questionnaires and interviews, we found that $H2$, $H10$ and $H11$ were real for H&M. That mean that logo, advertising and exhibition design of store were more important for H&M's sales among the 11 visual recognition components. Then, we used Eviews to do the in-depth analysis of these three visual recognition components.
We did Data Preprocessing first, using the natural logarithm transformation for original data, and got the processed data. Secondly, we did Unit Root Test. Its purpose was to do a stationary test for variables. The third test was Cointegration Test. The purpose of this was to test cointegration relationship between variables, and then determine the regression equation between the variables. The Final one was Pairwise Granger Causality Tests. The purpose was to examine the direction of interaction between the variables. Through four measurements we could get some accurate values. It could accurately measure the trend of these three visual identity components impacting on H&M sales.

5.3.1 Data selection of Eviews Analysis Software

Through the results of the questionnaires and interviews, we found logo, advertising and exhibition design of store were important components. So we searched the official website of H&M, and found out H&M’s quarterly financial reports from 2006 to 2012. We chose some data from cash flow report and balance sheet. Empirical analysis requires sufficient data to keep its result’s accuracy, therefore we decided to use quarterly financial report, in which case we would have 24 sets of data( that is from 2006-2012).

To run Eviews analysis, we need find expenditure figures that related to the three visual identity components we identified. We used “sales including VAT” and “sales excluding VAT” as sales revenue. “VAT” means value added tax. Advertising investment was an important component of intangible investment in fixed assets. We used “investment in intangible fixed asset” as the value of the advertising. For exhibition design of store, we used “investment in leasehold rights” and “investment in buildings and land”. For the logo and/or symbol expenditure, we used “investments in other immaterial assets”. Detailed information of the above correlation values are in Appendix B.

5.3.2 Data Preprocessing

As previously mentioned, in order to avoid trend and seasonal fluctuations of time series, we took a natural logarithm transformation as preprocessing methods to the original data. As shown in Appendix B, the original projects were “Sale excluding
VAT”, “Sale including VAT”, “Advertising”, “Storefront” and “Brand Logo”. We conducted logarithmic calculate to each project. The after processing projects were “LNSALESEX”, “LNSALESIX”, “LNADCOST”, “LNLESHOLD” and “LNOTHERIMM”. For example, when we did the natural logarithm transformation to “Advertising”, we called it “LNADCOST”. The result of natural logarithm calculation of all variable was shown in Table 12.

<table>
<thead>
<tr>
<th>obs</th>
<th>LNSALESEX</th>
<th>LNSALESIX</th>
<th>LNADCOST</th>
<th>LNLESHOLD</th>
<th>LNOTHERIMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006Q1</td>
<td>9.694964016</td>
<td>9.8543084</td>
<td>4.557948435</td>
<td>1.879812987</td>
<td>2.053103755</td>
</tr>
<tr>
<td>2006Q2</td>
<td>9.716052788</td>
<td>9.873519441</td>
<td>1.656228989</td>
<td>2.814760027</td>
<td>2.134956298</td>
</tr>
<tr>
<td>2006Q3</td>
<td>9.787886582</td>
<td>9.945034626</td>
<td>0.858537663</td>
<td>2.578118742</td>
<td>3.331971227</td>
</tr>
<tr>
<td>2007Q3</td>
<td>9.897466155</td>
<td>10.0606135</td>
<td>0.898616925</td>
<td>5.187565204</td>
<td>2.544837523</td>
</tr>
<tr>
<td>2007Q4</td>
<td>9.939481613</td>
<td>10.10206414</td>
<td>3.798297664</td>
<td>5.980208561</td>
<td>3.530756002</td>
</tr>
<tr>
<td>2008Q1</td>
<td>9.964522201</td>
<td>10.12715628</td>
<td>4.255827009</td>
<td>6.538903088</td>
<td>1.70691637</td>
</tr>
<tr>
<td>2008Q3</td>
<td>10.00528153</td>
<td>10.16647683</td>
<td>4.869229489</td>
<td>5.930905751</td>
<td>3.345195283</td>
</tr>
<tr>
<td>2009Q1</td>
<td>10.12934483</td>
<td>10.28608206</td>
<td>4.263231325</td>
<td>3.434968308</td>
<td>4.614427604</td>
</tr>
<tr>
<td>2009Q2</td>
<td>10.15697906</td>
<td>10.31661773</td>
<td>2.692390705</td>
<td>4.57165149</td>
<td>3.853259763</td>
</tr>
<tr>
<td>2009Q3</td>
<td>10.12205283</td>
<td>10.2790716</td>
<td>3.792070947</td>
<td>4.019819586</td>
<td>3.341825271</td>
</tr>
<tr>
<td>2009Q4</td>
<td>10.15079229</td>
<td>10.30752993</td>
<td>4.23167253</td>
<td>3.913484232</td>
<td>2.631410026</td>
</tr>
<tr>
<td>2010Q1</td>
<td>10.19432357</td>
<td>10.35052527</td>
<td>1.19919988</td>
<td>4.191866762</td>
<td>4.656004904</td>
</tr>
<tr>
<td>2010Q2</td>
<td>10.17411324</td>
<td>10.33358521</td>
<td>4.944113347</td>
<td>4.799023048</td>
<td>2.635473958</td>
</tr>
<tr>
<td>2010Q3</td>
<td>10.25146161</td>
<td>10.40681041</td>
<td>1.796887591</td>
<td>4.729933461</td>
<td>3.358029242</td>
</tr>
<tr>
<td>2010Q4</td>
<td>10.21361918</td>
<td>10.37155859</td>
<td>1.797177068</td>
<td>3.990891557</td>
<td>1.41246061</td>
</tr>
<tr>
<td>2011Q1</td>
<td>10.18057007</td>
<td>10.33640625</td>
<td>2.501145506</td>
<td>4.04211909</td>
<td>3.73363383</td>
</tr>
<tr>
<td>2011Q2</td>
<td>10.1957637</td>
<td>10.35967642</td>
<td>3.379974971</td>
<td>4.093883053</td>
<td>4.421938119</td>
</tr>
<tr>
<td>2011Q3</td>
<td>10.24819493</td>
<td>10.40337588</td>
<td>3.361063796</td>
<td>3.647460012</td>
<td>4.543309315</td>
</tr>
<tr>
<td>2012Q1</td>
<td>10.30440848</td>
<td>10.46119681</td>
<td>4.750268864</td>
<td>3.792255738</td>
<td>3.4754856</td>
</tr>
<tr>
<td>2012Q2</td>
<td>10.33119891</td>
<td>10.46635056</td>
<td>4.989269072</td>
<td>3.974207012</td>
<td>3.751432319</td>
</tr>
<tr>
<td>2012Q3</td>
<td>10.31403976</td>
<td>10.46420126</td>
<td>5.16672885</td>
<td>3.950367832</td>
<td>3.3109028</td>
</tr>
<tr>
<td>2012Q4</td>
<td>10.30839228</td>
<td>10.46265051</td>
<td>5.602322705</td>
<td>3.620463649</td>
<td>4.366065515</td>
</tr>
</tbody>
</table>

Table 12. Pre-processing Data (Own construction)

**Not:**

i. “Obs” means time sequence. “ln A” means taking the natural logarithm for “A”.

ii. “LNSALESEX” means “ln (Sale excluding VAT)”.
iii. “LNSALESIX” means “ln (Sale including VAT)”.

iv. “LNADCOST” means “ln (Advertising)”.

v. “LNLESHOLD” means “ln (Storefront)”.

vi. “LNOTHERIMM” means “ln (Brand Logo)”.

5.3.3 Unit Root Test

Unit root test data was the first step, when the data sequence into the Eviews analysis software. In this thesis, we chose ADF test methods to test data sequence. We set up the significant level is 1%, 5% and 10%. First, conducted the unit root test to the original data sequence under the significance level. But the result showed that the original data sequence is non-stationary sequence. Next, we selected difference terms on the operating platform, in order to do the First Difference for original data sequence. Significance level remains unchanged. At this point, the results showed the sequence after a First Difference is stationary sequence. Specific analysis process unit root test saw Appendix C. The whole results of unit root test were shown in Table 13.

The Table 13 showed that the original variables sequence is non-stationary series. Therefore, these variables couldn’t be directly used in the regression equation to test the variable relationship. It resulted in the fallacy of regression. However, all variables became steady sequence after the first-order differential treatment.

In addition, “C, T, L” in ADF test mode represented the constant term, the time trend, and the Lag Order. From the results, we could see that only the Lag Order of "DLEASEHOSA" is 2. "DLEASEHOSA" represents “LEASEHOSA” after the First Difference. This showed that this variable is likely to have a lag. In the following analysis, we would conduct additional analysis on this point. As we could see, the original variable sequence was non-stationary, but the variable sequence after First Difference was stationary sequence. This showed that the variables have some kind of co-integration. For the overall results of unit root test, we need to bring the data sequence to the next stage of Eviews analysis software, and to do the co-integration test.
Table 13. Results of the Unit Root Test (Eviews Analysis Software)

Note:

i. “Augmented Dickey-Fuller test statistic” based on the sequence diagram of the data to determine all variables’ intercepts and trends. Using the AIC criterion to determine the Lag Order.

ii. “D” mean the First Difference.

iii. “C” means the constant term. “T” means the time trend. “L” means the Lag Order

5.3.4 Co-integration Test

In Eviews analysis software, we applied the Engel-Granger method in the co-integration test. The Engel-Granger method included two steps. The first step was establishing regression equation. Determine the dependent variable and the independent variables, establishing the multiple regression equation between the variables. The second step, conducted the ADF test to the Residual Error of the regression equation. If it was determined that the Residual Error sequence is stationary sequence, and then the regression equation was tenable. If it was determined that the Residual Error sequence is non-stationary, the regression equation was untenable. Specific co-integration test process of each variable saw Appendix D.
5.3.4.1 Co-integration analysis for LNSALESEX

The first step was regression analysis for LNSALESEX. Choosing LNSALESEX to do the regression analysis to the other variables. The regression analysis used the least squares method. The process of Eviews software analysis saw Appendix 2. Through the regression analysis, we could obtain the regression relationship between LNSALESEX and the other variables. The regression equation (A) was as follows.

Regression Equation A:

\[ \text{LNSALESEX} = 0.026826 \text{LNADCOST} - 0.010066 \text{LNLESHOLD} + 0.093909 \text{LNOTHERIMM} + \epsilon_t \]

R-squared=0.252962, F-statistic=2.70895, Durbin-Watson stat=0.441277

Note: Due to store investment data is asset data, so its regression coefficient was a negative figure.

The second step was stationary test of the residuals. Testing process of the steady residuals (the ADF test method) saw Appendix 2. After the steady test of the residuals, we integrated the test results. The steady testing result of the residuals (the ADF test method) was as Table 15 follows.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Augmented Dickey-Fuller test statistic</th>
<th>1% level</th>
<th>5% level</th>
<th>10% level</th>
<th>Prob.*</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \epsilon_t )</td>
<td>-5.180157</td>
<td>-3.886751</td>
<td>-3.052169</td>
<td>-2.666593</td>
<td>0.0008</td>
<td>steady</td>
</tr>
</tbody>
</table>

Table 14.Result of the study residuals: DLNSALESEX (Eviews Analysis System)

By the co-integration results we could see that on the 1%, 5%, 10% significance level, DLNSALESEX had co-integration relationship with DLNADCOST, DLNLESHOLD, and DLNOTHERIMM. This indicated that there is a long-term stable equilibrium relationship between DLNSALESEXSA and DLNADCOSTSA, DLNLESHOLD, DLNOTHERIMM in the sample period. The Co-integration relationship between DLNSALESEX and DLNOTHERIMM was even more marked than with DLNADCOSTSA, DLNLESHOLD.

From the regression results, the fitting degree of the regression equation was high. OTHERIMM and ADCOSTSA also had a significant positive impact on SALESEX. LESHOHD had a negative impact on SALESEX. Judging from the regression
equation, when OTHERIMM increased every one-percentage point, SALESEX changed 0.093909 percentage points. When ADCOST changed every one-percentage point, SALESEX changed 0.026826 percentage points. When LESHOLD changed every one-percentage point, LNSALESEX changed 0.010066 percentage points.

**5.3.4.2 Co-integration analysis for LNSALESIX**

The first step was regression analysis for LNSALESIX. Choosing LNSALESIX to do the regression analysis to the other variables. The regression analysis with the least squares method. The process of Eviews software analysis saw Appendix 2. Through the regression analysis, we could obtain the regression relationship between LNSALESIX and the other variables. The regression equation B was as follows.

**Regression Equation B:**

\[
\text{LNSALESIX} = 0.026045 \ln\text{ADCOST} - 0.008186 \ln\text{LESHOLD} + 0.092871 \ln\text{OTHERIMM} + E_t
\]

R-squared=0.252166, F-statistic=2.69756, Durbin-Watson stat=0.442621

Note: Due to store investment data is asset data, so his regression coefficient is a negative figure.

The second step was stationary test of the residuals. Testing process of the steady residuals (the ADF test method) saw Appendix 2. After the steady test of the residuals, we integrated the test results. The steady testing result of the residuals (the ADF test method) was as Table 16 follows.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Augmented Dickey-Fuller test statistic</th>
<th>1% level</th>
<th>5% level</th>
<th>10% level</th>
<th>Prob.*</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>( E_t )</td>
<td>-7.793327</td>
<td>-3.711457</td>
<td>-2.981038</td>
<td>-2.629906</td>
<td>0</td>
<td>Steady</td>
</tr>
</tbody>
</table>

**Table 15. Result of the study residuals: DLNSALESIX (Eviews Analysis System)**

By the co-integration results we could see that on the 1%, 5%, 10% significance level, DLNSALESIX had co-integration relationship with DLNADCOSTSA, DLNLESHOLD, and DLNOTHERIMM. This indicated that there was a long-term stable equilibrium relationship between DLNSALESIX and DLNADCOST, DLNLESHOLD, DLNOTHERIMM in the sample period. The Co-integration
relationship between DLNSALESIXSA and DLNOTHERIMM was even more marked than with DLNADCOSTSA, DLNLESHOLD.

From the regression results, the fitting degree of the regression equation was high. LOTHERIMM and LNADCOSTSA also had a significant positive impact on SALESIX. LESHOLD has a negative impact on SALESIX. Judging from the regression equation, when OTHERIMM increased every one-percentage point, SALESIX changed 0.092871 percentage points. When ADCOST changed every one-percentage point, SALESIX changed 0.026045 percentage points. When LESHOLD changed every one-percentage point, SALESIX changed 0.008186 percentage points.

5.3.5 Pair-wise Granger Causality Test

Pair-wise Granger Causality Test was a supplementary test in Eviews analysis software. Pair-wise Granger Causality Test was used to test variables lagged effect. In other words, testing the direction of influence between the variables. As results of 5.2.2, the Lag Order of one First Difference variable was two. This indicates that a variable may be has lagged effect.

As “LNADCOST” example, we firstly calculated the probability of “LNADCOST does not Granger Cause LNSALESEX” is 0.1291. Then, we calculated the probability of “LNADCOST does not Granger Cause LNSALESEN” was 0.6024. Finally, we compared these two probabilities. The probability of “LNADCOST does not Granger Cause LNSALESEN” was higher. So, we analysis “LNADCOST” didn’t lagged affected on dependent variable. It means that LNADCOST impacted on LNSALESEN in one direction. The overall results of Pair-wise Granger Causality Test showed in Table 17.

Table 17 results showed, probability of "LNADCOST does not Granger Cause LNSALESEX" was 0.1291, less than 0.6024. Probability of “LNADCOST does not Granger Cause LNSALESEN” was 0.1134, also less than 0.6161. This showed that ADCOST affects SALE, and this effect was in one direction. There was no lagged effect between SALE variable and ADCOST variable.

Probability of “LNOTHERIMM does not Granger Cause LNSALESEX” was 0.1274, less than 0.5578. Probability of “LNOTHERIMM does not Granger Cause
"LNSALESIX" was 0.1327, also less than 0.609. This showed that OTHERIMM affects SALE, and this effect was in one direction. There was no lagged effect between SALE variable and OTHERIMM variable.

Probability of "LNLESHOLD does not Granger Cause LNSALESEX" was 0.6126, more than 0.0818. Probability of "LNLESHOLD does not Granger Cause LNSALESIX" was 0.5813, also more than 0.0718. This showed that LESHOLD affects SALE each other, and this effect was in two-way direction. There was the lagged effect between SALE variable and LESHOLD variable. Moreover, the lagged effect of the SALE variable on LESHOLD variable was significant.

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNSALESEX does not Granger Cause LNADcost</td>
<td>26</td>
<td>0.51932</td>
<td>0.6024</td>
</tr>
<tr>
<td>LNADcost does not Granger Cause LNSALESEX</td>
<td></td>
<td>2.26055</td>
<td>0.1291</td>
</tr>
<tr>
<td>LNSALESIN does not Granger Cause LNADcost</td>
<td>26</td>
<td>0.49568</td>
<td>0.6161</td>
</tr>
<tr>
<td>LNADcost does not Granger Cause LNSALESIN</td>
<td></td>
<td>2.41886</td>
<td>0.1134</td>
</tr>
<tr>
<td>LNSALESEX does not Granger Cause LNLESHOLD</td>
<td>26</td>
<td>2.82720</td>
<td>0.0818</td>
</tr>
<tr>
<td>LNLESHOLD does not Granger Cause LNSALESEX</td>
<td></td>
<td>0.50158</td>
<td>0.6126</td>
</tr>
<tr>
<td>LNSALESIN does not Granger Cause LNLESHOLD</td>
<td>26</td>
<td>2.99404</td>
<td>0.0718</td>
</tr>
<tr>
<td>LNLESHOLD does not Granger Cause LNSALESIN</td>
<td></td>
<td>0.55673</td>
<td>0.5813</td>
</tr>
<tr>
<td>LNSALESEX does not Granger Cause LNOTHERIMM</td>
<td>26</td>
<td>0.60034</td>
<td>0.5578</td>
</tr>
<tr>
<td>LNOTHERIMM does not Granger Cause LNSALESEX</td>
<td></td>
<td>2.27606</td>
<td>0.1274</td>
</tr>
<tr>
<td>LNSALESIN does not Granger Cause LNOTHERIMM</td>
<td>26</td>
<td>0.50790</td>
<td>0.609</td>
</tr>
<tr>
<td>LNOTHERIMM does not Granger Cause LNSALESIN</td>
<td></td>
<td>2.22660</td>
<td>0.1327</td>
</tr>
</tbody>
</table>

Table16. Result of Pair-wise Granger Causality Tests (EVIEWS Analysis System)

5.3.6 Review of EVIEWS Analysis

The result of Eviews software analysis fully explained the relationship and trend of correlation between the variables. The regression equations of SALESEX and SALESIX were very similar. Therefore, we got the final regression equation. The result was as follows.

Regression Equation:

\[ \text{LNSALE} = 0.026 \text{LNADcost} - 0.011 \text{LNLESHOLD} + 0.091 \text{LNOTHERIMM} + E_t \]

R-squared=0.25, F-statistic=2.71 , Durbin-Watson stat=0.441
Note: Due to store investment data is asset data, so his regression coefficient was a negative figure.

Based on the above analysis, we could clearly see the specific effecting trend of advertising, storefront and brand logo for H&M sales. Advertising, as one of the components in the visual identity, had a high degree of influence on H&M sales. If advertising investment of H&M increased one percent, H&M sales increased 0.026 percent. And the positive impact of advertising for H&M sales was one-way.

Brand Logo, as one of the components in the visual identity, had a high degree of influence for H&M sales. If the investment in brand logo of H&M one percent, H&M sales increased 0.09 percent, the positive impact of brand logo for H&M sales was one-way.

Storefront, as one of the components in the visual identity, had a high degree of influence for H&M sales. If the investment in storefront of H&M increased one percent, H&M sales changed 0.01 percent. And the direction impact of storefront for H&M sales was two-way. It means that the investment in storefront and H&M sales affected each other.

We compared absolute value of the regression coefficients in the regression equation. As we could see, the regression coefficient of LNOTHERIMM was the biggest. Therefore, Brand Logo, as one of the components in the visual identity, impacts H&M sales the most.

5.4 Reflection and Analysis of Theoretical Framework

We completed the analysis of questionnaire, interview, and Eviews. According to the theoretical model, we have completed the three levels of analysis.

There were eleven components of visual identity according to research papers in this area. They are name, logotype/symbol, typography, colour, slogan, uniform, printed material, equipment or facility, packaging, advertising, and storefront. The goal of this research paper is to answer the two reach questions we identified previously: 1. Which visual identity component is more important to the H&M sales? 2. How these more important visual identity components do impact on the sales of H&M?

To answer the first question, we analyzed 103 questionnaire feedbacks and the
information we obtained through interview. Logotype/symbol, advertising and storefront are three important visual identity components from both consumer and employee’s point.

We then took the corresponding data of these three components into Eviews calculation to find out the answer to the second research question. Eviews result showed when advertising investment increased one percent, the sales increased 0.026 percent, the direction of influence was one-way. When the investment in brand logo of H&M increased one percent, H&M sales increased 0.09 percent, the direction of influence of advertising and brand logo were one-way. When the investment in storefront of H&M increased one percent, H&M sales increased 0.01 percentage points. The direction of influence of storefront on H&M sales was two-way. Among those three visual identity components, advertising is the most influential factor on sales revenue. This result does not only answer the research question2, but also validated the method and assumptions for the second step of the model.

Our analysis approved that our theoretical model was effective and executable. Therefore, the conclusion of this thesis is reliable.

![Figure 3. Reflection of theoretical model (own construction)](image-url)
6. Conclusion

This chapter has three parts: summary of the thesis’s results, contribution and suggestion. The first part is the summary of the result based on the research questions and theoretical model. The second part is about the contribution of this thesis, including society and related fields. The third part is the proposal/suggestion for H&M. Of course, some of these suggestions could also apply to similar brands.

6.1 Results of the Research Study

Through previous empirical findings and analysis, we can answer our research questions. Visual identity has eleven components. They are name, logotype and/or symbol, typography, colour, slogan, printed materials, uniforms, equipment, packaging, advertising, exhibition design, and exteriors. Through the questionnaire and interviews, we can conclude that logotype and/or symbol, advertising and storefront are more important for H&M's sales than the rest of the eleven visual identity components.

We use Eviews analysis software to analyze the quantitative relationship between these three visual identity components and H&M sales. And we got the mathematical relationship between these three components and H&M’s sales through regression equation. We can clearly see how these three important visual identity components relate to H&M’s sales. When advertising expenditure of H&M increased every one-percent, H&M sales increased 0.026 percent. The positive impact of advertising for H&M sales was one-way. When the investment in brand logo of H&M increased one-percent, H&M sales increased 0.09 percent, this positive impact of brand logo on H&M sales was one-way. When the investment in storefront of H&M increased one-percent, H&M sales changed 0.01 percent. The direction of this impact was two-way. It means that investment in storefront and H&M’s sales affect each other. Through regression equation, we also find out brand logo was the most important visual identity component for H&M’s sales revenue.

The process and results of this research fully applied our theoretical model, and ultimately achieved the purpose of our study. As we mentioned earlier, we hope that the results of this thesis can be some help to H&M for its future development.
6.2 Contribution

By analysis, we got answers of our research questions, and these answers are satisfactory. It shows that visual identity is also can used for a brand. Flowing this thesis, we identified three visual identity components that have greater impact on H&M’s sales revenues. We hope our findings can be helpful to H&M and other companies that are in similar situation, especially when H&M and other companies are struggling with resource allocation. Advertising and Logo expenditure should be on the priority list as they can guarantee the increase of sales revenue.

Meanwhile, there is no research paper on how visual identity impact on brand sales. This thesis can fill the gaps in this field. So we hope this thesis through by analysis of H&M, an international successful brand, can help other brands to improve them, which also want to be international and successful.

6.3 Research Implication

There are some recommendations we would like to propose to H&M Company. First of all, H&M’s investment of Logotype and/or symbol, advertising and storefront should higher than investment on other components. As our research result showed, these three components enable H&M to generate more sales revenue. Secondly, H&M can provide uniforms to its employees. Uniform do not only represents H&M brand’s image, but also plays an important role in promotion. Uniforms make it more convenience for customers to communicate with H&M’s employees. Thirdly, H&M should provide free publications as more as possible. Free Publications is a good platform to communicate with consumers, and it could also attract consumers to buy their product. Fourthly, H&M should increase publicity for their slogan. Slogan conveys brand concept, and slogan will help consumers to understand H&M’s brand concept. Finally, H&M should improve its loge to make it more attractive to consumers. Logo is one of the most important marks of H&M.

Those five recommendations can also be used for other brands. Logotype/symbol, advertising and storefront play more important role on H&M’s sales. They may have similar role to play for companies with similar business model.
6.4 The Area of Further Research

The thesis, visual identity components impact on the H&M sales, is limited in Swedish market and H&M brand. As we said in the early, the thesis maybe not suit for all brand. But we hope the research process of the thesis is also helpful for other brand. If some brand also want to investigate their visual identity components, this thesis will be useful for them. We hope the further research about visual identity components start with other brand, like Zara, G-stare and others. On the other hand, the market we study in the thesis is Swedish market. Maybe in other national market is similar or different. Therefore, we hope the further research about visual identity can be studied in other national market, like China, England and others. Besides that, this thesis just discussed about how the visual identity components impact on the sales, but not pay more attentions in how the manager solve the problems. We hope the further research can have a deep study in these areas.
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**Others:**


Appendix A: Questionnaire about Visual Identity of H&M

Have you ever bought H&M's products?  A Yes  B No

1. Which is the best way of visual spread in H&M? What do you think?
   A. Advertising
   B. Printed publication
   C. Exhibition design
   D. Billboards, brand trademark, or brand identification
   E. Image of staff
   F. Office environment
   G. Product packaging
   H. Brand slogan

2. What do you think the advantage and disadvantage of H&M logo?
   A. The name is easy to remember
   B. Bright colors
   C. Eye-catching logo
   D. Modern sense is not strong
   E. Visual impact is not enough
   F. Personalized (peculiarity) is scarce
   G. Visual artistry is not strong

3. Is H&M branding name impress you?
   A. Yes
   B. No

4. Does H&M’s branding name affect purchase decision for you (Does it arouse your buying inclination when you hear the name?)?
   A. Yes
   B. No

5. How do you think the resolution of H&M Logo?
   A. High degree
   B. General degree
   C. Low degree

6. As a consumer, how do you think about the H&M Logo?
   A. New and unique
   B. It’s easy to remember
   C. High popularity
   D. Internationalization

7. Do you think that material information (like Logo) of type setting are important for H&M branding’s publicity on posters?
   A. Important
   B. Common
   C. Unimportant
8. If H&M Loge changes color collocation, would you care about it?
   A. Completely not
   B. Some influence
   C. Care about it greatly

9. Do you know the slogan of H&M?
   A. Yes
   B. No

10. Did you notice the H&M unified staff uniforms?
    A. Yes, they have.
    B. No, they haven’t.
    C. Never care about it.

11. Do you think it’s necessary that employees should have unified uniforms?
    A. Yes, it will increase brand publicity.
    B. Unnecessary

12. Did you read free publications of H&M?
    A. Yes
    B. No

13. Did you ever want to buy H&M products by reading the H&M’s free publications?
    A. Yes
    B. No

14. Is H&M packaging bag characteristic for you?
    A. Yes
    B. No

15. Do you think that packaging is an important part of the H&M brand publicity?
    A. Yes
    B. No

16. How do you think the seating position of H&M stores?
    A. Conspicuously, it’s easy to finding.
    B. It’s undetectable.

17. Do you enjoy the whole shopping process in H&M store’s environment?
    A. Yes, it’s bright and simple.
    B. No, the bad environment affects my mood of shopping.

18. Is the advertising (TV commercial, Print ads, etc.) of H&M attractive for you?
    A. Yes
    B. No

19. Does H&M advertising affect you purchase decision?
    A. Yes, it does.
    B. No, it doesn’t.

20. What do you think about the display facilities? Are they characteristic?
    A. Yes, they are characteristic and special.
    B. No, they are general and not characteristic.
## Appendix B: The Original Data Table

### Associated Projects and Values of Sales, Advertising, Storefront, and Logotype

<table>
<thead>
<tr>
<th>Year</th>
<th>Brand Logo</th>
<th>Slogan</th>
<th>Advertising</th>
<th>Sale</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>2017</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>2018</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>2019</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>2020</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
<td>4.5%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

### Investment in Intangible Assets

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment in Intangible Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>5%</td>
</tr>
<tr>
<td>2017</td>
<td>6%</td>
</tr>
<tr>
<td>2018</td>
<td>7%</td>
</tr>
<tr>
<td>2019</td>
<td>8%</td>
</tr>
<tr>
<td>2020</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Investment in Buildings and Land

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment in Buildings and Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>15%</td>
</tr>
<tr>
<td>2017</td>
<td>16%</td>
</tr>
<tr>
<td>2018</td>
<td>17%</td>
</tr>
<tr>
<td>2019</td>
<td>18%</td>
</tr>
<tr>
<td>2020</td>
<td>19%</td>
</tr>
</tbody>
</table>

### Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
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<td>2017</td>
<td>31%</td>
</tr>
<tr>
<td>2018</td>
<td>32%</td>
</tr>
<tr>
<td>2019</td>
<td>33%</td>
</tr>
<tr>
<td>2020</td>
<td>34%</td>
</tr>
</tbody>
</table>

### Uppers

<table>
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<tr>
<th>Year</th>
<th>Uppers</th>
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<tbody>
<tr>
<td>2016</td>
<td>15%</td>
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<tr>
<td>2018</td>
<td>17%</td>
</tr>
<tr>
<td>2019</td>
<td>18%</td>
</tr>
<tr>
<td>2020</td>
<td>19%</td>
</tr>
</tbody>
</table>
Appendix C: Unit root test process of all variables

1. LNADCOST &D (LNADCOST)

Null Hypothesis: LNADCOST has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th></th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-4.393490</td>
<td>0.0019</td>
</tr>
<tr>
<td>Test critical values:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% level</td>
<td>-3.699871</td>
<td></td>
</tr>
<tr>
<td>5% level</td>
<td>-2.976263</td>
<td></td>
</tr>
<tr>
<td>10% level</td>
<td>-2.627420</td>
<td></td>
</tr>
</tbody>
</table>


Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNADCOST)
Method: Least Squares
Date: 04/23/13   Time: 21:22
Sample (adjusted): 2006Q2 2012Q4
Included observations: 27 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNADCOST(-1)</td>
<td>-0.902159</td>
<td>0.205340</td>
<td>-4.393490</td>
<td>0.0002</td>
</tr>
<tr>
<td>C</td>
<td>3.159922</td>
<td>0.765968</td>
<td>4.125400</td>
<td>0.0004</td>
</tr>
</tbody>
</table>

R-squared: 0.435701
Adjusted R-squared: 0.413129
S.E. of regression: 1.487985
S.E. of regression: 1.487985
Sum squared resid: 55.35248
Sum squared resid: 55.35248
Log likelihood: -48.00278
Log likelihood: -48.00278
F-statistic: 19.30275
F-statistic: 19.30275
Prob(F-statistic): 0.000179

Null Hypothesis: D(LNADCOST) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th></th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-10.69951</td>
<td>0.0000</td>
</tr>
<tr>
<td>Test critical values:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% level</td>
<td>-3.711457</td>
<td></td>
</tr>
</tbody>
</table>

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNAD\text{COST,2})
Method: Least Squares
Date: 04/23/13 Time: 21:22
Sample (adjusted): 2006Q3 2012Q4
Included observations: 26 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LNAD\text{COST(-1))}</td>
<td>-1.607074</td>
<td>0.150201</td>
<td>-10.69951</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>0.165987</td>
<td>0.291520</td>
<td>0.569385</td>
<td>0.5744</td>
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</tbody>
</table>

R-squared 0.826689 Mean dependent var 0.128358
Adjusted R-squared 0.819468 S.D. dependent var 3.498212
S.E. of regression 1.486358 Akaike info criterion 3.704339
Sum squared resid 53.02227 Schwarz criterion 3.801115
Log likelihood -46.15640 Hannan-Quinn criter. 3.732207
F-statistic 114.4794 Durbin-Watson stat 2.420771
Prob (F-statistic) 0.000000

2. LNLE\text{SHOLD} & D (LNLE\text{SHOLD})

Null Hypothesis: LNLE\text{SHOLD} has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-2.865788 0.0627</td>
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</table>

Test critical values:
- 1% level: -3.699871
- 5% level: -2.976263
- 10% level: -2.627420

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNLESHOLD)
Method: Least Squares
Date: 04/23/13   Time: 21:23
Sample (adjusted): 2006Q2 2012Q4
Included observations: 27 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNLESHOLD (-1)</td>
<td>-0.399186</td>
<td>0.139294</td>
<td>-2.865788</td>
<td>0.0083</td>
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<td>C</td>
<td>1.836381</td>
<td>0.640513</td>
<td>2.867045</td>
<td>0.0083</td>
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</table>

R-squared    0.247277
Mean dependent var 0.064469
Adjusted R-squared 0.217168
S.D. dependent var 0.982089
S.E. of regression 0.868931
Akaike info criterion 2.628080
Schwarz criterion 2.724068
Hannan-Quinn criter. 2.656622
Durb-Watson stat 2.184321

Augmented Dickey-Fuller test statistic -6.516952 0.0000

Test critical values:
1% level -3.711457
5% level -2.981038
10% level -2.629906


Null Hypothesis: D(LNLESHOLD) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

Augmented Dickey-Fuller Test Equation
Dependent Variable: D (LNLESHOLD,2)
Method: Least Squares
Date: 04/23/13   Time: 21:23
Sample (adjusted): 2006Q3 2012Q4
Included observations: 26 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LNLESHOLD(-1))</td>
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<td>0.194140</td>
<td>-6.516952</td>
<td>0.0000</td>
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<tr>
<td>C</td>
<td>0.052108</td>
<td>0.190676</td>
<td>0.273283</td>
<td>0.7870</td>
</tr>
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</table>
3. LNOTHERIMM & D (LNOTHERIMM)

Null Hypothesis: LNOTHERIMM has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-4.364731</td>
</tr>
</tbody>
</table>

Test critical values:
- 1% level: -3.699871
- 5% level: -2.976263
- 10% level: -2.627420


Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNOTHERIMM)
Method: Least Squares
Date: 04/23/13   Time: 21:23
Sample (adjusted): 2006Q2 2012Q4
Included observations: 27 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNOTHERIMM (-1)</td>
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<td>0.193712</td>
<td>-4.364731</td>
<td>0.0002</td>
</tr>
<tr>
<td>C</td>
<td>2.915854</td>
<td>0.671558</td>
<td>4.341922</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

R-squared: 0.432474
Mean dependent var: 0.085665
Adjusted R-squared: 0.409773
S.D. dependent var: 1.181954
S.E. of regression: 0.908050
Akaike info criterion: 2.716153
Sum squared resid: 20.61389
Schwarz criterion: 2.812141
Log likelihood: -34.66807
Hannan-Quinn criter.: 2.744696
F-statistic: 19.05087
Durbin-Watson stat: 2.055115
Prob(F-statistic): 0.000001

Prob (F-statistic): 0.000001
Null Hypothesis: D (LNOTHERIMM) has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th>Augmented Dickey-Fuller test statistic</th>
<th>t-Statistic</th>
<th>Prob.*</th>
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<tbody>
<tr>
<td></td>
<td>-9.632758</td>
<td>0.0000</td>
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</table>

Test critical values:  
1% level: -3.711457  
5% level: -2.981038  
10% level: -2.629906


Augmented Dickey-Fuller Test Equation  
Dependent Variable: D(LNOTHERIMM,2)  
Method: Least Squares  
Date: 04/23/13   Time: 21:24  
Sample (adjusted): 2006Q3 2012Q4  
Included observations: 26 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LNOTHERIMM(-1))</td>
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<td>0.166381</td>
<td>-9.632758</td>
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<td>0.194159</td>
<td>0.592079</td>
<td>0.5593</td>
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</table>

R-squared 0.794503  Mean dependent var 0.037455  
Adjusted R-squared 0.785941  S.D. dependent var 2.137976  
S.E. of regression 0.989168  Akaike info criterion 2.889898  
Sum squared resid 23.48288  Schwarz criterion 2.986675  
Log likelihood -35.56868  Hannan-Quinn criter. 2.917766  
F-statistic 92.79002  Durbin-Watson stat 1.858118  
Prob(F-statistic) 0.000000

4 LNSALESEX & D (LNSELASEX)

Null Hypothesis: LNSALESEX has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th>Augmented Dickey-Fuller test statistic</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-1.829125</td>
<td>0.3591</td>
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</tbody>
</table>

Test critical values:  
1% level: -3.699871
Augmented Dickey-Fuller Test Equation

Dependent Variable: D(LNSALESEX)
Method: Least Squares
Date: 04/23/13   Time: 21:24
Sample (adjusted): 2006Q2 2012Q4
Included observations: 27 after adjustments

<table>
<thead>
<tr>
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<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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</thead>
<tbody>
<tr>
<td>LNSALESEX (-1)</td>
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<td>0.033721</td>
<td>-1.829125</td>
<td>0.0793</td>
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<tr>
<td>C</td>
<td>0.643467</td>
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<td>1.895729</td>
<td>0.0696</td>
</tr>
</tbody>
</table>

R-squared       0.118032
Adjusted R-squared 0.082753
S.E. of regression 0.033572
R-square criterion 0.035053
Akaike criterion 0.035053
Schwarz criterion 0.035053
Hannan-Quinn criterion 0.035053
Durbin-Watson statistic 2.300572

Null Hypothesis: D(LNSALESEX) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-5.311345</td>
</tr>
</tbody>
</table>

Test critical values:
1% level         -3.711457
5% level         -2.981038
10% level        -2.629906


Augmented Dickey-Fuller Test Equation
Dependent Variable: D (LNSALESEX,2)
Method: Least Squares
Date: 04/23/13   Time: 21:24
### 5. LNSELASIN & D (LNSELASIN)

Null Hypothesis: LNSELASIN has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LNSELASIN(-1))</td>
<td>-0.062255</td>
<td>0.032818</td>
<td>-1.896967</td>
<td>0.0694</td>
</tr>
<tr>
<td>C</td>
<td>0.658882</td>
<td>0.335514</td>
<td>1.963797</td>
<td>0.0608</td>
</tr>
</tbody>
</table>

Test critical values:  
1% level: -3.699871  
5% level: -2.976263  
10% level: -2.627420


Augmented Dickey-Fuller Test Equation  
Dependent Variable: D (LNSELASIN)  
Method: Least Squares  
Date: 04/23/13   Time: 21:24  
Sample (adjusted): 2006Q2 2012Q4  
Included observations: 27 after adjustments
Null Hypothesis: D(LNSALESIN) has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic based on SIC, MAXLAG=6)  

<table>
<thead>
<tr>
<th>Augmented Dickey-Fuller test statistic</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test critical values:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% level</td>
<td>-3.711457</td>
<td>0.0002</td>
</tr>
<tr>
<td>5% level</td>
<td>-2.981038</td>
<td></td>
</tr>
<tr>
<td>10% level</td>
<td>-2.629906</td>
<td></td>
</tr>
</tbody>
</table>


Augmented Dickey-Fuller Test Equation  
Dependent Variable: D(LNSALESIN,2)  
Method: Least Squares  
Date: 04/23/13  Time: 21:25  
Sample (adjusted): 2006Q3 2012Q4  
Included observations: 26 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LNSALESIN(-1))</td>
<td>-1.101427</td>
<td>0.205140</td>
<td>-5.369142</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>0.025038</td>
<td>0.008387</td>
<td>2.985476</td>
<td>0.0064</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.545693</td>
<td>Mean dependent var</td>
<td>-0.000799</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.526763</td>
<td>S.D. dependent var</td>
<td>0.050913</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.035024</td>
<td>Akaike info criterion</td>
<td>-3.791768</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.029440</td>
<td>Schwarz criterion</td>
<td>-3.694991</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>51.29298</td>
<td>Hannan-Quinn criter.</td>
<td>-3.763900</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>28.82769</td>
<td>Durbin-Watson stat</td>
<td>1.920392</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000016</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix D: The cointegration test processes of all variables

### 1. Cointegration test processes---LNSALESEX

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNSDLCOST</td>
<td>0.026426</td>
<td>0.024384</td>
<td>1.100154</td>
<td>0.2822</td>
</tr>
<tr>
<td>LNLESHOLD</td>
<td>-0.010066</td>
<td>0.029047</td>
<td>-0.34653</td>
<td>0.732</td>
</tr>
<tr>
<td>LNOTHERIMM</td>
<td>0.093909</td>
<td>0.038131</td>
<td>2.462766</td>
<td>0.0213</td>
</tr>
<tr>
<td>C</td>
<td>9.70443</td>
<td>0.184441</td>
<td>52.6155</td>
<td>0</td>
</tr>
</tbody>
</table>

| R-squared      | 0.252962    | Mean dependent var | 10.07267 |
| Adjusted R-squared | 0.159582   | S.D. dependent var | 0.197087 |
| S.E. of regression | 0.180678   | Akaike info criterion | -0.452639 |
| Sum squared resid | 0.783467   | Schwarz criterion | -0.262324 |
| Log likelihood  | 10.33695    | Hannan-Quinn criter. | -0.394458 |
| F-statistic     | 2.708956    | Durbin-Watson stat | 0.441277 |
| Prob (F-statistic) | 0.067593   |                      |          |

Null Hypothesis: D(RESID) has a unit root  
Exogenous: Constant  
Lag Length: 1 (Automatic based on SIC, MAXLAG=4)

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-5.180157</td>
</tr>
</tbody>
</table>

Test critical values:  
1% level: -3.886751  
5% level: -3.052169  
10% level: -2.666593

Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 17

### Augmented Dickey-Fuller Test Equation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(RESID(-1))</td>
<td>-2.290218</td>
<td>0.442114</td>
<td>-5.180157</td>
<td>0.0001</td>
</tr>
<tr>
<td>D(RESID(-1),2)</td>
<td>0.495662</td>
<td>0.253255</td>
<td>1.957164</td>
<td>0.0706</td>
</tr>
<tr>
<td>C</td>
<td>-0.000143</td>
<td>0.010279</td>
<td>-0.013878</td>
<td>0.9891</td>
</tr>
</tbody>
</table>

| R-squared      | 0.814354    | Mean dependent var | -0.003927 |
| Adjusted R-squared | 0.787833   | S.D. dependent var | 0.091427 |
| S.E. of regression | 0.042113   | Akaike info criterion | -3.338137 |
| Sum squared resid | 0.024829   | Schwarz criterion | -3.191099 |
| Log likelihood  | 31.37417    | Hannan-Quinn criter. | -3.323521 |
| F-statistic     | 30.70611    | Durbin-Watson stat | 2.109903 |
| Prob (F-statistic) | 0.000008   |                      |          |
1. Cointegration test process---LNSALESIX

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNADCCOST</td>
<td>0.026045</td>
<td>0.024083</td>
<td>1.081472</td>
<td>0.2902</td>
</tr>
<tr>
<td>LNLESQHOLD</td>
<td>-0.008186</td>
<td>0.028689</td>
<td>-0.285323</td>
<td>0.7778</td>
</tr>
<tr>
<td>LNOTHERIMM</td>
<td>0.092871</td>
<td>0.03766</td>
<td>2.466007</td>
<td>0.0212</td>
</tr>
<tr>
<td>C</td>
<td>9.859961</td>
<td>0.182162</td>
<td>54.1274</td>
<td>0</td>
</tr>
</tbody>
</table>

R-squared: 0.252166  Mean dependent var: 10.23022
Adjusted R-squared: 0.158687  S.D. dependent var: 0.194548
S.E. of regression: 0.178446  Akaike info criterion: -0.477499
Sum squared resid: 0.764231  Schwarz criterion: -0.287184
Log likelihood: 10.68498  Hannan-Quinn criterion: -0.419318
F-statistic: 2.69756  Durbin-Watson stat: 0.442621
Prob(F-statistic): 0.068379

Null Hypothesis: D(RESID) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic based on SIC, MAXLAG=4)

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>-7.793327</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Augmented Dickey-Fuller test statistic

Test critical values:
1% level: -3.711457
5% level: -2.981038
10% level: -2.629906

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID,2)
Method: Least Squares
Date: 04/23/13  Time: 22:24
Sample (adjusted): 2006Q3 2012Q4
Included observations: 26 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(RESID(-1))</td>
<td>-1.449457</td>
<td>0.185987</td>
<td>-7.793327</td>
<td>0</td>
</tr>
<tr>
<td>C</td>
<td>0.019534</td>
<td>0.020805</td>
<td>0.938889</td>
<td>0.3571</td>
</tr>
</tbody>
</table>

R-squared: 0.716767  Mean dependent var: -0.008018
Adjusted R-squared: 0.704966  S.D. dependent var: 0.192469
S.E. of regression: 0.104543  Akaike info criterion: -1.604627
Sum squared resid: 0.262303  Schwarz criterion: -1.50785
Log likelihood: 22.86015  Hannan-Quinn criterion: -1.576759
F-statistic: 60.73594  Durbin-Watson stat: 1.921827
Prob (F-statistic): 0