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Sonic Branding: a framework for understanding sound branding and an overview of its most notable practices across industries

Sebastien Bollue

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Abstract

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Author(s) Sebastien Bollue	

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Report/thesis title Sonic Branding: a framework for understanding sound branding and an overview of its most notable practices across industries	**Number of pages and appendix pages** 42 + 3

This thesis presents the importance and relevance of sound in branding, as very few studies on sonic branding have been conducted so far.

The aim of this thesis is to lay out a framework for understanding sonic branding as a phenomenon and for getting an overview of the most notable practices of sonic branding across various industries. The study is commissioned by the advertising agency Wondergarden for who a workshop was also created. Additionally this thesis hopefully can inspire others to pursue further research regarding the business related aspects of sound.

The study makes use of literature review, desktop research, and a qualitative interview, and attempts to answer the following research questions:
1. What is sonic branding as a phenomenon?
2. Why do certain sound patterns become "earworms" and how could they support a brand?
3. What is the process behind creating assets of sonic branding?

Before introducing sonic branding, the elements that constitute the term are analyzed. The physical and biological properties of sound are explored: what sound is, the impact of sound on the brain, and earworms.

Sonic branding and its practices are introduced and the traditional approach practiced by marketing agencies and the research on hit song prediction by Tom Bergmans are reviewed to explore how to create recognizable sonic properties.

The theoretical framework is supported by a short benchmarking of three large international businesses that successfully incorporate sonic branding: The Coca Cola Company, The McDonald's Corporation, and Mercedes-Benz.

The data collected, the workshop, the conclusions, the suggestions, and the learning outcomes are all presented in detail. The summary also presents the findings that are most valuable to the commissioner.

The thesis argues that sonic branding deserves to be seen as a highly valued and powerful tool.

Keywords
sonic branding, sound branding, sound, earworm, recognition, hit song

Table of contents

1   Introduction

This thesis is commissioned by Wondergarden, an advertising agency in Mechelen, Belgium. (http://www.wondergarden.be/) Wondergarden consists of seven regular employees that they like to call the *gardeners*. Unlike the typical advertising agency, Wondergarden offers a complete package of services. Together with a vast network of partners, the *gardeners* assist clients through projects in "creativity, media, music, online, and PR". They are also independent and do all media planning and media buying themselves. Their goal is to work and grow together with their clients.

Wondergarden, who already agreed to have me as an intern in summer 2015, subsequently also accepted to commission this thesis. The reason for the choice of the topic sonic branding is due to Wondergarden's several ongoing projects to create jingles for clients, at that time. Another reason is also the topic's timely relevance in general. Only recently, after several centuries of existence, have some brands started to really focus on the use of sound and music as part of a branding strategy.

Across all industries there are examples of how music is integrated to deliver more consumer engagement, brand awareness, and emotional appeals. Music and sound in general are also widely used in advertising campaigns, product design, soundscapes, and so on. Industries invest into music and sound engineering, and in other scientific fields there is enough research collected that highlights the primal nature of sound and music in decision-making. This reflects enough evidence that effective branding does not go without sound.

Since sonic branding is part of the services that Wondergarden has to offer, it is important to have up-to-date information and a well-informed team that can communicate the importance of sonic branding to its customers. Therefore, the Wondersound workshop was created and held on 3 July 2015 for the *gardeners* at the Wondergarden office.

Nowadays, in the branding industry there are very few studies on sonic branding. And when it comes to the research in Universities and Universities of Applied Sciences, topics that could relate to the business aspect of branding with sound are almost non-existent. There could be many reasons for this lack of information on the use of sound in business. Perhaps the practitioners prefer to rely on their own developmental resources to advance sonic branding. Perhaps the students and academics are not fully aware about the importance and relevance of sonic branding.

The gap in academic knowledge on sonic branding is evident and quite regrettable, as it prevents the inclusion of sonic branding into university curricula. It also prevents a closer cooperation between universities and the industry in the field of sonic branding. As music plays an important part in their lives, students could become more motivated to develop and study sonic branding if such a gap could be bridged. Studying sonic branding could help them see the business applications of what they tend to see rather as a hobby. Thus, besides focusing on Wondergarden, this thesis will also take a look at the academic community and the industry, where the company acts as a stakeholder.

This thesis sets out to lay the framework for understanding sonic branding as a phenomenon and for getting an overview of the most notable practices of sonic branding across various industries. Hopefully, this framework will help Wondergarden communicate the importance and relevance of sound in branding towards its clients. Additionally, this thesis also aims to inspire others to pursue further research regarding the business related aspects of sound.

To do so, the thesis provides/will provide the answer to the following research questions:
1. What is sonic branding as a phenomenon?
2. Why do certain sound patterns become "earworms" and how could they support a brand?
3. What is the process behind creating assets of sonic branding?

The thesis relies on several methods, including literature review, qualitative interview, and desktop research. **Literature review** grounds the notions of branding and sound, including their physical and biological aspects, and to form an image of sonic branding as a whole. **Qualitative interviews** map the opinions of industry representatives on what matters in sonic branding. **Desktop research** benchmarks the practices of sonic branding across several industries.

The study has been developed in close cooperation with the commissioner, Wondergarden, via email and phone. Additionally, a variety of courses taught at Haaga-Helia University of Applied Sciences have been useful for this thesis, for instance the courses *Introduction to thesis writing*, *Research methods, Academic English* and other courses.

The data collected with the help of literature review is presented in Chapter 2. As this research is tied to business through the branding aspect, branding will be reviewed first. Next, both the physical and biological aspects of sound will be discussed, as well as the

impact of sound and music on the brain and memory. The traditional approach practiced by marketing agencies and the research on hit song prediction by Tom Bergmans will be reviewed to explore how to create sonic properties.

Chapter 3 presents the benchmarking of three large international businesses that successfully incorporate sonic branding: The Coca Cola Company, The McDonald's Corporation, and Mercedes-Benz.

Chapter 4 discusses the results and research methods, and the Wondersound workshop will be presented.

Chapter 5 covers the discussion and the reliability and validity of this thesis. The learning outcomes and this thesis' contribution to university research will also be discussed.

2　Theoretical framework

In order to fully understand what sonic branding is as a key term, first the elements that build up this term will be analyzed. Branding will be discussed before studying sound. The thesis will then look at how branding and sound can successfully serve a brand strategy.

2.1　Branding

2.1.1　The concepts of brand and branding

The word *brand* derives from *brandr*, which in Old Norse is referred to the way livestock owners used to, and continue nowadays, burn their mark into their animals to identify them. (Keller;Apéria;& Georgson, 2012)

There are many ways in today's business world to define what a brand is and many ways to interpret such definitions. One clear and easy-to-understand definition of brand is by Keller: "a way to distinguish the goods of one producer from those of another" (Keller;Apéria;& Georgson, 2012). Such ways can include any type of product identification: a name, term, design, symbol, or any other aspect that distinguishes a product or service from those of other sellers (AMA, 2014)

Most definitions are very similar to the above and mainly focus on what a brand does, namely differentiating products. Jackson (2003) offers a different way of looking at a brand, focusing more on where brands come from rather than on what they do.

In his approach, Jackson (2003) interestingly enough defines a brand as an "idea, stemming from belief, that through its consistent identity, experience and the positive emotional investment (PEI) of stakeholders, creates sustainable benefits." A brand comes from people not from companies. In other words if a group of people who share a belief in a certain idea, communicate and sell that belief to others, the idea or the brand will become more and more popular (Jackson, 2003). If a belief is the foundation of a brand, then it would make sense to say that branding as a process is a process of creating, developing, and spreading that belief.

Additionally, Jackson (2003) describes branding as having a process with Positive Emotional Investment, i.e. the belief is essentially emotional and sharing that belief to others is also emotional (Jackson, 2003). This thesis will take/adapt the above view suggested by Jackson because it combines effectively the consumer's input in branding process and the emotional aspects of brands.

Furthermore, the definition of a brand invites to consider the legal support that exists for brands. If a brand is a belief, then owning a brand is similar to owning an idea and ideas cannot always be protected by copyright (United States Copyright Office). At the same time, to enable copyright, a brand would include both tangible and intangible components, idea being the intangible one and logos, sound bits, designs, templates, and so on as the tangible ones.

Thus a cumulative definition for the purpose of this thesis could be as follows – **a brand** is an emotional belief that is created by consumers of a product through interacting with its tangible and intangible properties, a belief that is shared with others and that can be protected by copyright law.

Next, the study will introduce the notions of brand equity, brand identity, and brand image.

2.1.2 Brand equity

Brand equity is the added value that a recognizable brand creates for the brand owner and the brand consumer (Brand Equity). Brand equity as a value is thus an asset. Similarly to other assets in a business, brand equity is planned, developed, enhanced, and managed.

As the American Marketing Association states, "brand equity is strategically crucial, but famously difficult to quantify". That is why many experts work on the tools to measure brand equity, even if there is no universally accepted measuring system. (AMA, 2014)

Yet the added value of a particular brand can be measured by comparing it to the value of other brands. (Aaker, 2010) This thesis is in fact an attempt to contribute to such measurement of brand equity from the perspective of its sonic assets. The tools to measure brands come often from marketing campaigns, profiling past and current experiences, and by comparing these results to those of competing brands.

Comparison of brands shows that brands with stronger brand equity are less risky. Through experience of brands, consumers determine for themselves what exactly satisfies their needs and what does not. (Kotler & Keller, 2009) If customers decide to focus on other products, their past branding experiences with the product in question would make such departure from the brand emotionally risky. The benefit of having a strong brand is that it inspires fidelity and that it results in stable sales. Other benefits of

having a strong brand include the ability of strong brands to enter new markets and to create barriers for other entrants to the markets (Kapferer, 2008).

Measuring a brand and its equity is easier with an analytical approach, whereby a brand is seen as consisting of a number of components (or assets, constituents, elements, etc.). There are various ways to model brand equity through its components. Further below, Figure 1 demonstrates how Aaker (2010) defines and categorizes such components of a brand as brand assets.
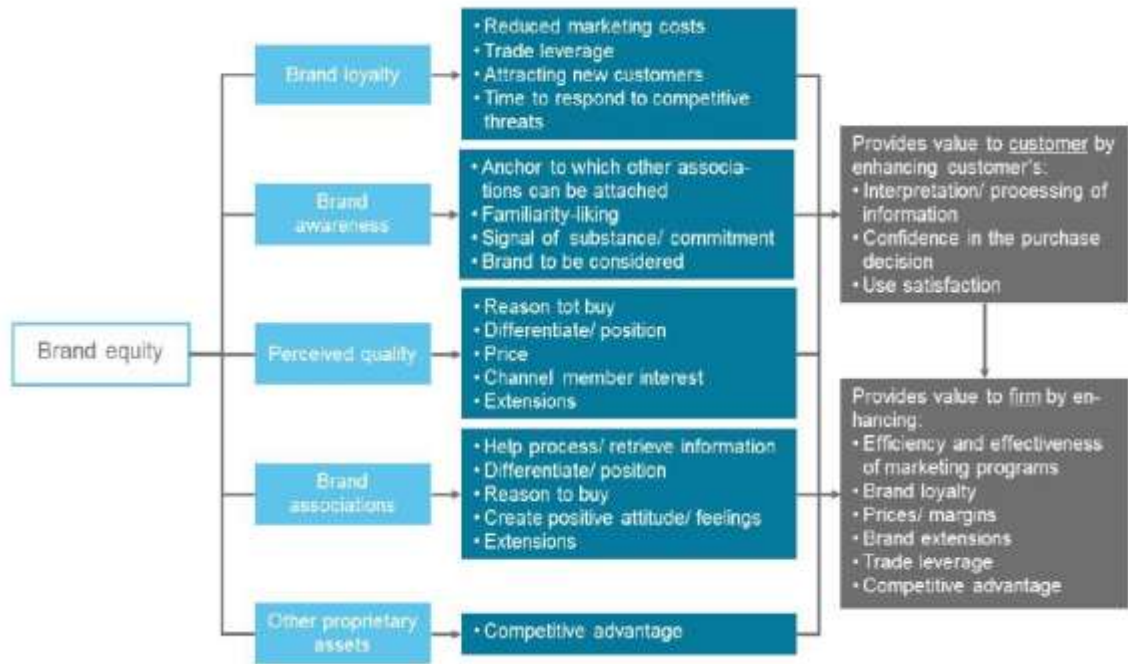
Figure 1. Brand Equity Model – Aaker (Keller;Apéria;&Georgson, Strategic Brand Management : A European Perspective, 2012)

In Aaker's model, brand equity includes five major asset categories: brand name awareness, brand loyalty, perceived quality, brand associations, and other proprietary brand assets.

Each asset creates value in its own ways, which are listed in the model above as more detailed specifications. For instance, brand associations can be specified as the ways to retrieve relevant information about the brand, to differentiate the brand favourably, to raise purchasing motivation, to create positive feelings, and to extend the brand further.

It is important in Aaker's opinion, that all the brand assets link back to the overall brand equity. Otherwise, the brand may lose its strength. (Aaker, 2010)

While all Aaker's categories are interlinked and could all relate to sonic branding, it is brand awareness and brand associations that are the most relevant to sonic branding. These assets, more than the other assets, enable people to recognize the brand and link the sonic components to the overall brand equity.

Brand awareness is seen by Aaker as a state of mind where a consumer puts the brand onto the so-called mental billboard. Each brand may be entitled to one mental billboard in consumers' mind and the larger the size of such a billboard, the larger the consumers' awareness about the brand. (Aaker, 2010)

Brand association can be seen as a mental process, whereby a brand attribute becomes connected to consumers' previous experiences of the brand or other things. Brand association also contributes to brand recognition, whereby past experiences of the brand, irrespectively of where and when they occurred, makes the consumer more confident about their brand associations. Research has also proven that people will have a better feeling around almost anything, simply as a result of recognition. (Aaker, 2010)

A research by DDB advertising agency studied the views of marketing directors on the role of different assets of brand equity in building up a strong brand. According to the research, 65% of the respondents saw brand awareness as the main component of a strong brand equity; 39% of respondents gave the top priority to brand positioning, personality, and precise distinct image; 36% of respondents focused on the strength of recognizing logos and packaging among the consumers; and finally 24% of respondents linked a strong brand with the brand's authority with consumers, brand esteem, brand's perceived status, and consumer loyalty. Thus the research shows clearly that brand awareness is the most important characteristic of a strong brand. (Kapferer, 2008)

2.1.3   Brand identity vs. brand image

Brand identity and brand image both relate to the positioning of a brand. The difference between brand identity and brand image is the point of view: brand identity refers to how the brand communicates its beliefs and values to customers; brand image refers to how the consumers perceive and interpret those beliefs and values.

Brand identity represents what the brand stands for. Identity provides the brand with direction, purpose and meaning. Central to the brand's strategic vision, it contains associations that the brand strives to create and/or maintain, which drives the associations dimension in Aaker's Brand Equity Model, see section 2.1.2. (Aaker, 2010)

Brand image includes a mix of perceptions and beliefs of consumers that evolve over time through experience. (Kotler & Keller, 2009) This experience can result from contact with different touch points of the product or service that the brand has to offer. A positive brand image therefore derives from positive contact with the brand such as the long-lasting quality of a product, a pleasant and helpful interaction with a customer service representative, a funny or clever advertisement, and so on. In contrast, a negative brand image could come from a long and arduous customer service experience, a poor quality product that didn't last very long, an offensive advertisement, and so on.

The process of managing and perceiving a brand is visualized by Kapferer as follows in Figure 2 and Figure 3.
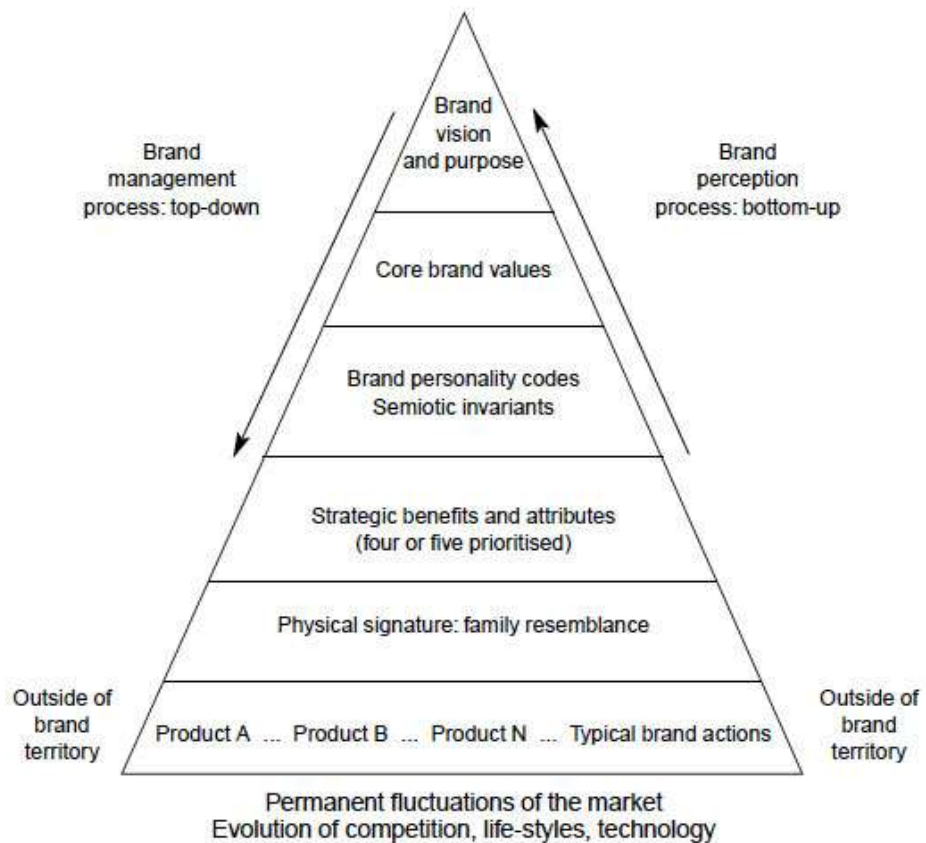
Figure 2. The Brand System (Kapferer, 2008)

In Kapferers' Brand System (See figure 2 above) brand identity is created from a top down perspective and starts with brand vision, purpose, and value. At the same time brand image is formed upwards with the experiences of brand actions and attributes.
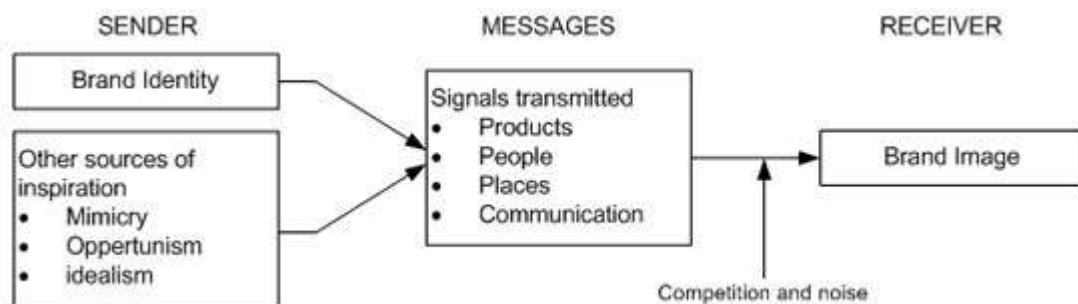
Figure 3: Brand Identity and Brand Image (Kapferer, 2008)

In Figure 3 Kapferer focuses more on the message the company communicates. You can see how in terms of brand management brand identity is on the sender's side, while brand image is on the receiver's side. The goal of the sender is to project a clear image and meaning. The brand image is thus a result of how the receivers decode all signals that are communicated by the brand and emerged from its products and services. (Kapferer, 2008)

A brand image emerges through the past experiences and is usually a passive process, whereby the customer does not take an active role. Brand identity should on the other hand, should be future oriented, in order to maximize the chances off a positive image. (Aaker, 2010)

2.2   Audio

Customers rely on many senses when recognizing something. Similarly, when interacting with a brand people make use of these senses. It therefore makes sense to take advantage of that in branding. Sight is the most universal and the easiest to work with across industries, which is why branding is usually very focused on visual attributes of a product. That is why hearing and the use of sound in branding is a much underrated concept in the branding industry. Research has shown that sound creates visual imagery and automatic projections; if you hear a bellowing sound, you will think of seeing a cow before you actually see it (University of Glasgow, 2014). This makes sound very valuable in constructing mental imagery.

Yet before learning how sound can be used in branding we need to understand the physical nature of sound and hearing. Therefore, one needs to know the basic physics of waves. The following sections will briefly introduce the subject, as well as look at how sound has been previously used in business.

2.2.1 Physical properties of sound

Sound is a wave that is typically created by the vibration of an object. This wave transports energy, which makes particles in a medium vibrate when it moves through that medium. In most cases that medium is air: for example the air in your living room is a medium for the music you are listening to. However, if you were to put headphones on, then the medium would be the copper wires in your headphones. Sound waves are also often compared to slinky coils, as the energy in the sound wave moves as if from one coil to another. (The Physics Classroom) (The physics of sound)

When a sound wave travels through a medium, the amount of times the particles in the medium vibrate as the wave travels is referred to as the wave frequency, which is calculated per unit of time. Frequency is typically expressed in Hertz (Hz), where 1 Hertz equals 1 cycle of vibration/second. (The Physics Classroom)
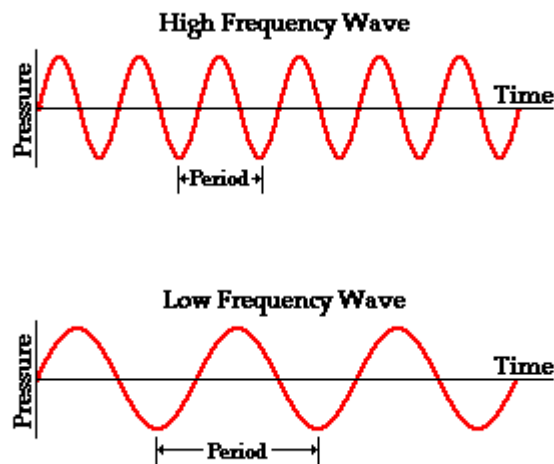
Figure 4. The frequency of sound waves (The Physics Classroom)

As you can see in Figure 4, a high frequency wave has a pressure time plot with a small period, whereas a low frequency wave has a pressure time plot with a larger period. This means that the more wavelengths a time unit contains, the higher their frequency. The sensation of a frequency is often referred to as the pitch of a sound. High frequency results in a high pitch sound while low frequency leads to a low pitch sound: a whistle can have a frequency of 1000Hz while thunder has a frequency of only 50Hz. (NDT Resource Center)

The human ear is a sensitive detector of fluctuations in air pressure that affect the eardrum. It is capable of detecting frequencies within the audible range of 20Hz to 20 000Hz. Any sound below 20Hz is called an infrasound, while anything above 20 000Hz

is called an ultrasound. The audible range of animals differs a lot from the human one: just think about a dog whistle that we cannot hear for example. A bat has an audible hearing range up to 120 000Hz since it relies heavily on its hearing for navigation; while an elephant's audible range goes as low as 5Hz. (The Physics Classroom)

The amount of energy that a sound wave transports through a given medium, in a given unit of time, is called the intensity of the sound wave. The more energy a wave transports the higher the waves are, which increases the intensity of the wave. Sounds with a higher intensity are commonly called louder. Although loudness cannot be quantified, the intensity of a sound can be calculated and is expressed in Decibels (dB). (The Physics Classroom) (NDT Resource Center)

Since the human ear can detect a large range of intensities, the decibels scale is based on powers of 10 and is referred to as a logarithmic scale. The threshold of hearing, at 0dB, corresponds with an intensity of $1*10^{-12}$ W/m^2, expressed in Watts/meter^2. The maximum intensity, at which the eardrum will be perforated, is at 160dB, corresponding with $1*10^4$ W/m^2, which is 16 times greater than the threshold of hearing. Figure 5 lists several common sounds and their intensity levels. (The Physics Classroom)

Source	Intensity	Intensity Level	# of Times Greater Than TOH
Threshold of Hearing (TOH)	$1*10^{-12}$ W/m^2	0 dB	10^0
Rustling Leaves	$1*10^{-11}$ W/m^2	10 dB	10^1
Whisper	$1*10^{-10}$ W/m^2	20 dB	10^2
Normal Conversation	$1*10^{-6}$ W/m^2	60 dB	10^6
Busy Street Traffic	$1*10^{-5}$ W/m^2	70 dB	10^7
Vacuum Cleaner	$1*10^{-4}$ W/m^2	80 dB	10^8
Large Orchestra	$6.3*10^{-3}$ W/m^2	98 dB	$10^{9.8}$
Walkman at Maximum Level	$1*10^{-2}$ W/m^2	100 dB	10^{10}
Front Rows of Rock Concert	$1*10^{-1}$ W/m^2	110 dB	10^{11}
Threshold of Pain	$1*10^1$ W/m^2	130 dB	10^{13}
Military Jet Takeoff	$1*10^2$ W/m^2	140 dB	10^{14}
Instant Perforation of Eardrum	$1*10^4$ W/m^2	160 dB	10^{16}

Figure 5. Sound Intensity and Decibel Levels (The Physics Classroom)

2.2.2   Biological properties of sound

As stated earlier, sound is a wave of energy, caused by a vibration, which travels through a medium. The human ear can pick the wave and translate it into a nerve impulse that goes to the brain, which results in hearing. The human ear consists of three parts that each have a specific purpose. Figure 6 depicts the anatomy of the human ear.
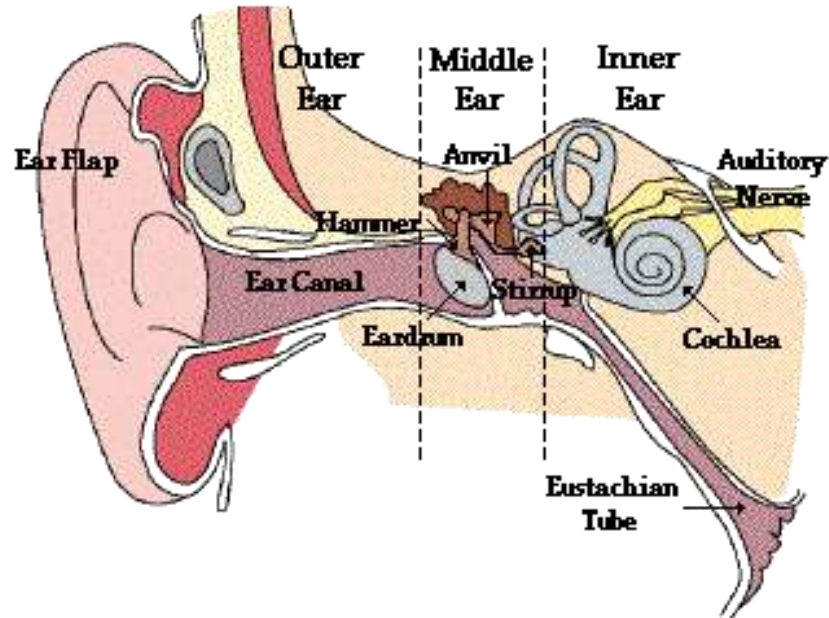
Figure 6. The human ear (NDT Resource Center)

The ear flap in the outer ear collects sound and channels it to the middle ear through the ear canal. The sound waves make the eardrum in the middle ear vibrate. That vibration is passed on through the hammer, the anvil, and the stirrup, three small bones in the middle ear. From the stirrup, the vibrations travel into the cochlea in the inner ear. The cochlea is filled with cells connected to nerves, which transform the energy into nerve impulses that are transmitted to the brain. (The Physics Classroom) (NDT Resource Center)

Understanding the physical and biological properties of sound also allows understanding the impact of sound on the brain, which will be introduced briefly in the next section.

2.2.3   The impact of sound on the brain

The human brain puts the input of all senses together. That happens in the temporal lobes of the brain that are responsible for forming and retrieving memories, and integrating sensations such as sight, sound, taste, and touch. Especially for sound, the temporal lobes contain an auditory cortex. (NINDS)

Research (Janata, 2009) shows that the medial pre-frontal cortex region can also put experiences of sound together with memories and emotions. This occurs within a larger area of the brain, which is responsible for decision making, planning, thinking, and storing long-term emotional memories. Therefore, it is interesting to see that part of the cortex region also links sound and emotions.

One type of sound patterns help linking memories particularly well – music. Music is organised through rhythm and when lyrics are involved, the rhythm may be complemented by rhyme. Both rhythm and rhyme provide cues to retrieving information. An example where rhythm and rhyme can organise and guide memory is poetry or epic stories, which could be passed on across generations without being written down. (Jenkins, 2014)

A further connection between music and memory can be proven by observations of patients who live with Alzheimer's disease. These patients react strongly to music and the part of the brain described above, that is responsible for linking sounds and memories, remains the least affected by the disease. Music can thus trigger patients' memories and serve as soundtrack for a mental movie.

A heart-warming example of this is a short video of a man in a nursing home that reacts to listening music from his past. A man who is usually unresponsive completely comes alive when listening to his personalized playlist. (Music And Memory, 2011)

The benefits of listening to music extend far beyond Alzheimer patients. Memories attached to music bring a lot of positive emotions to people in general: one listens to a song from years ago and is completely taken back to that moment in time. In most cases this would be music that the person used to listen to from 12 to 22 years old, as during this time period a person experiences new things for the first time, becomes independent, and has dramatic experiences of adolescence.

In most cases these memories include friends, since music is often listened to in a company as a way to belong to a certain social group. Such music often includes pop music, as that is what is being streamed in the background of everyday life, when commuting, attending events, etc. In short, popular music gets attached to the memories during the processes that shape our identity. Listening to the music of the past allows thus rediscovering the meaningful experiences of one's youth. (Jenkins, 2014) (Stern, 2014)

Another proof of the primal nature of sound and music can be found in the research at the University of Glasgow. They suggest that sound is important for survival reasons and created visual imagery, mental images, and automatic projections of what the sound is and where it came from. The example used in the study considers hearing a motorbike approaching from around the corner. Hearing that sound, you would expect a motorbike coming around the corner not a horse for example. (University of Glasgow) (Medical News Today, 2014)

Furthermore, Honing (2014) suggests that certain sounds may cause the release of endorphins like oxytocin. Oxytocin is a pleasure chemical released when eating and during sexual contact, which means that our biological system prompts us to eat and have sex. Now if music affects oxytocin levels, that may suggest that music is not just a luxury and simply related to memory. Even if researchers still need to find out how, music is somehow entwined with our biological system. (Honing, 2014)

Making music together, synchronises the activity of the brain waves of the people engaged. When people have to coordinate actions that have to be precisely aligned in time with one another, small networks within and even between the brains are formed (Max-Planck-Gesellschaft, 2012). This would explain why people tend to have positive social feelings towards one another, when trying to keep the beat or harmonizing; even when the other person is neither visible nor in the same room. (Suttie, 2015)

Even if researchers do not understand yet how music is entwined with our biological system, it seems safe to conclude that music has a rather positive impact on our brain. Taking that into consideration, sound and music in particular can serve as powerful recognition and remembrance tools in branding.

To summarise the above, music can be linked to memories in the brain, allowing people to relive moments from their youth and helping people living with Alzheimer remember things from the past. Music also creates mental imagery which can serve as a survival advantage, yet can also appear in the mind as an earworm. The next section will explore this topic further.

2.2.4 Earworms

The ability of sound and music to impact the brain is also supported by the phenomenon of earworms (from the German *Ohrwurm*), a form of mental state, whereby a part of a song or a tune gets stuck in one's head as if in a loop. Usually earworms are seen as an irritation. Reports show that 90% of people experience an earworm at least once a week, and a quarter of the 90% may experience an earworm several times a day. (Margulis E. H., 2015)

Earworms tend to come up in the middle of tasks that do not require much attention such as waiting for a traffic light to change or standing in line at the grocery store. They also tend to emerge in the brain after one has just heard a particular song or tune or hears it repeatedly. (Margulis E. H., 2015)

The tunes or songs that usually end up in a loop in your head often have a catchy melody, perhaps simple and upbeat. If lyrics are involved, they may include a surprising twist of meanings or a sound peculiarity that makes them catchy. The harder one tries to ignore an earworm, the more difficult it becomes. Stafford (2012) compares this phenomenon to a psychological paradox where one is asked not to think of a polar bear: while trying not to think of something, you have to check constantly if you are still thinking of it or not. This automatically brings to mind what you are trying to ignore.

Earworms are also strengthened by repetitive sound patterns. For example, 90% of the music we listen to is the music that we have heard before at some point. According to Margulis (2015), modern technology is to blame for allowing us to consume music repetitively; having invented sound recording, we listen to recordings of music over and over again on any storage device: casettes, CDs, etc. (Margulis, 2014; Margulis, 2015)

Interestingly enough, our brains can get randomly caught up in a loop only by audible tunes, not by taste of delicious food or by beautiful colours in a master painting. The tunes are special in such terms due to the way how music is represented in our memory. The brain anticipates notes that are to come in a melody by thinking ahead in time. When during a research conducted at Dartmouth College, U.S. (Dartmouth College, 2005) a research subject heard part of a familiar song, the auditory cortex of that person automatically filled in the rest. A good example of how a missing element in a melody can be restated is the following: when you are asked to pitch "you" in the happy birthday tune, you will probably sing the complete first part of the song and then get to the pitch that you were initially looking for. (Margulis, 2015)

Although researchers still do not know exactly why songs get stuck in our head, trying to understand tunes such as earworms might lead important information as to how our brain functions. To explore this connection between sound and branding, the next section will introduce the concept of sonic branding

2.3   Sonic Branding

2.3.1   What is sonic branding

The terms *sound* and *sonic* are largely interchangeable, whereby sonic branding can be seen as synonymous to sound branding, audio branding, and acoustic branding (ABA). In short, *sonic* (as part of sonic branding) is "anything you can hear", and just appears as a "sexier" and more generic term than sound branding. (Jackson, 2003)

Often sonic branding is defined by a variant of the following statement: "quite literally the way a brand sounds". (Lafferty, 2012) However, Jackson (2003) stresses the fact that sonic branding is twofold: creating a sonic property is important, yet the strategic and consistent usage of that sonic property across touch points is just as important. (Jackson, 2003) Two simple questions can determine if a sonic branding property is good or not: Do customers recognize this sound? And can they associate the sonic property with the brand? (Jackson & Jankovich, 2013)

A more precise definition comes from Audio Branding Academy (ABA): sonic branding is "the process of brand development and brand management by use of audible elements within the framework of brand communication". The ABA definition is well in line with the twofold theory by Jackson and will be adopted for the purposes of this thesis.

While all brands generate sound on a daily basis, there are brands that are unaware of the sound(s) they already make. Such brands can miss the opportunity to enhance and use the sound in branding. (Sonic Branding, 2010) Any sound that a brand makes can be used in a strategic way: the screeching sound of a subway arriving at a station might not be the most pleasant sound, but when used in a radio ad, for example, it will help people recognize immediately and associate the sound with the advertising message. (Fahey, 2013)

Nowadays there are so many possibilities you can communicate with your customers through sound across all the touch points: on TV, Radio, Cinema, Desktop, Telephone hold, Retail, Parties, Conferences, Offices, Web, CD, Events, Corporate videos, etc. However, the majority of brand's sounds are chosen unconsciously; brands invest a lot in looking good but not in how they sound. A number of successful businesses do invest in the music industry, and the value they get with the created sonic assets is far greater than their actual investment. (Jackson, 2003) (The Sound Agency) (Jackson & Jankovich, 2013)

Figure 7: The eight aspects of BrandSound (The Sound Agency)

The Sound Agency made a set of guidelines in which any sonic property can be classified.

As the above figure indicates, there are eight groups in which any sonic property fits: brand voice, brand music, sonic logo, advertising sound, branded audio, telephone sound, soundscapes, and product sound.

Brand voice is any speech used in branding. Does your brand sound male or female, old or young, lively or restrained, etc. **Brand music** refers to any music which a brand can be associated with: certain songs or artists. A **sonic logo** is a short tune that is used to recognize the brand. **Advertising sound** is any sound or music that is used in commercials. **Branded audio** refers to sounds or music that are produced or used as give-aways for customers such as podcasts for example. **Telephone sound** is any sound or music that is used in telephone handling systems, call centers, on-hold sounds, and so on. A **soundscape** is a mix of the words sound and landscape, which refers to any sound or music that is played in the background of stores, restaurants, bars, etc. Finally, the **product sound** is any utility sounds that the product makes, such as the sound of one's computer starting up. (The Sound Agency)

2.3.2   A brief history of sonic branding

Sound and music have been part of people's lives to identify ideas and beliefs, tribes, teams, and nations. The more the world progressed; the national anthem became a standard method to solicit patriotism during global events such as the Olympic Games or during war. Music has also been used for communication purposes for a long time already. Just think of tribes using drums to communicate or Pope Gregory collecting and

codifying all catholic chants to transmit beliefs to the church's audience. As for the commercial use of sound and music, the jingle could have been the first musical sales pitch.

Jackson & Jankovich (2013) believe jingles saw the light in the 1500s and 1600s, when the streets of London were filled with shops and the owners yelled short musical quips about what they were selling, to attract people. They state that those people have been "using branding tools before we even had brands" (Jackson & Jankovich, 2013). On of the most famous jingles, made in 1971, and that is still known today is the Coca Cola "I want to buy the world a Coke" tune.

In the following years, artists in the music industry and commercial brands started becoming partners. One of the earliest examples would be the partnership between The Rolling Stones and Jovan Musk, where Musk sponsored the Rolling Stones American Tour of 1981. Musk sponsored 1 million dollars for his logo on the American Tour's tickets and posters, which became a milestone in the history of tour corporate sponsorships. Another good example is when PepsiCola made a commercial on Michael Jackson's Billy Jean tune. The commercial became so popular that people called the radio stations requesting the Pepsi song.

In 2009, Heartbeats International, a Swedish sound branding agency, conducted a research in which they found out that 97% of top global brands think that music can strengthen their brand. (Heartbeats International, 2009)

2.4 How to create a recognizable tune

To learn how to create a recognizable tune, you can pull a parallel with the music industry where they have been looking for the recipe to make a hit song, which until today remains a million dollar question. This section will discuss the traditional approach that most marketing agencies seem to use to create their customer's sonic properties, as well as review the research of Tom Bergmans who created an app to predict hit songs, as part of his Master's thesis.

2.4.1 Traditional approaches practiced by marketing agencies

Most processes used by marketing agencies take a similar approach. This section will focus on the example from InPerfect pitch, as it contains the same widely used guidelines.

Step one usually consists of a "sonic audit". This is a reflection of where the company stands at that point regarding sonic branding. Any sound the business already makes are identified: sound and music for commercials, audio logos, telephone ringtones and on-hold music, voice overs, sound and music in stores, sound a product makes, and so on. This allows the business to then enhance and/or use those sounds in their sonic branding strategy.

Step two would then to reflect on the results of the audit in the previous step. Here the question "Where are we and where do we want to go?" comes into play. This is done in the form of a workshop, or workshops depending on the size of the company. In these workshops, mood boards are usually created and the composer then forms a general image of the sounds needed. In an interview with The Wall Street Journal, Joel Beckerman said that in this process he usually asks them not to tell them "what you want it to sound like; tell us how you want to feel when you hear it." (Jurgensen, 2012)

Step three consists of the creation of the sonic properties. These properties can be any of the eight types mentioned in section 2.3.1. Each sound and music piece is produced based on the same theme and in the case of multiple files they should be sound consistent.

Step four would include the testing and refining of the files created in the previous step. This is to make sure that the feelings or emotions associated to the sound and music created matches the values of the business.

In **step five**, a strategy is created to implement the created sonic properties consistently across touch points. These touch points, as discussed in section 2.3.1 are anywhere such as TV, Radio, cinema, and so on. The goal is to sound consistently across touch points so that customers associate a sound or music, perceived anywhere, with the brand.

The **sixth step** would be to implement that strategy, and to enhance it along the way.

2.4.2 Hit songs

Still today, "how to make a hit song" remains a million dollar question. According to Honing (2014), the Swedish group ABBA seems to have found a good working model to make songs that end up topping the hitlists. Although the recipe to make a hit song is still unknown, Honing (2014) say to have found three critical ingrediënts: recognizability, repetition, and "a hook".

Bergmans (2014) conducted a research to see if it is possible to predict if a song will become a hit song or not. There are two approaches to examine the songs: Look at the intrinsic characteristics, such as beats per minute, pitch, and key, or look at meta-information based on social media and user generated content. Bergmans (2014) applied both approaches on the Belgian Ultratop 50 Dance Chart.

For the **first approach**, Bergmans uses the characteristics from The Echonest, a database containing the intrinsic characteristics from most songs, to classify the songs. The information from The Echonest is then linked to the song's position in the Ultratop 50 list. These songs are then classified according to a higher or lower position.

The **second approach** is based on the website Last.fm, a social media platform based on the social experience around music. On this website all activity of a song on the platform is monitored and processed, which also affects the song's position.

The results of the research were promising as of all techniques tested their logistic regression was the most successful. Logistic regression is a binary model that predicts a binary response based on one or more variables. According to the research (Bergmans, 2014) songhotness, artisthotness, and artistfamiliarity were parameters with considerable impact of the performance of the models.

3   Benchmarking

As mentioned in Section 2.2, the visual aspect of branding has always been the dominant factor in brand identity. Over the years, visual design and visual branding have evolved in a complex way, leading to more efficient visuals used in branding. Yet sound and music, while being omnipresent in everyday life (from the alarm in the morning, to the gym, the commute, shopping, at work and at play), are still on the periphery of branding. This prevents the industry from using sound and music efficiently in branding (Jackson & Jankovich, 2013)

Research (Heartbeats International, 2009) shows that in 2009, 97% of marketing directors surveyed think that music can strenghten the brand. Also, 76% stated to actively use music as a part of their branding strategy and 7 out of 10 believe music would become more important towards the future. However, even though these marketing directors think that sound is an important element of branding, 8 out of 10 businesses do not have a sound logo yet. Also, 6 out of 10 businesses have not even figured out what their brand sounded like yet, and 7 out of 10 businesses spend 5% or less on sonic branding. (Heartbeats International, 2009)

Yet there are successful businesses across industry sectors that do allocate significant budgets into sonic properties. The next section will benchmark three large international businesses that successfully incorporate sonic branding.

The benchmarking will rely on the most up-to-date (at the time of writing) list of best global brands compiled by Interbrand, a prominent British brand consultancy (http://www.interbrand.com/en). The brands suggested for the benchmarking are all in the top ten list of best global brand 2014: The Coca Cola Company, The McDonalds Corporation, and Mercedes-Benz.

For each business that is benchmarked, two examples will be given. The benchmarking also attempts to lay out different types of sonic properties, such as in the Brandsound diagram from The Sound Agency presented in section 2.3.1.

3.1   The Coca Cola Company

One company in the top ten of the Interbrand 2014 list that unsurprisingly stands out in terms of sonic branding is The Coca-Cola Company (http://www.coca-cola.com/global/glp.html). The brand is very often associated with its slogans, such as

Always Coca-Cola, Open to Happiness, etc. These slogans are traditionally accompanied by songs or jingles, often with an earworm effect.

Yet not only The Coca Cola Company uses music in their advertising campaigns, they actually commission the song-writing instead of licensing existing songs from the catalogues. Their campaigns are always based on inspiring stories about sharing "the happiness" of drinking a coke together.

An example of such sonic branding is the song "The world is ours", which has been created for the 2014 World Cup Soccer in Brazil. As for many of The Coca Cola Company's advertisements, this song has been made in collaboration with the music agency Music Dealers. They were looking for an infectious blend between American Pop and Brazilian Samba, and worked with the Indonesian Singer-Songwriter Millane Fernandez. (Music Dealers, The world is ours Indonesian localization, 2014)

Another example for which The Coca Cola Company solicited Music Dealers to create a soundtrack for their advertisement is the campaign for Coke Zero in 2012. For the campaign, the company commissioned a video that tells a story of a young man who gets inspired by playing with a glass bottle of Coca Cola Zero and this inspiration takes the character into a new dancing career. The song commissioned for the video is an up-beat track that attracted more than 5 million viewers in two years. (Music Dealers, A step from zero, 2014)

In both cases, The Coca-Cola decided to commission the songs, which allows them to use the songs for any other campaign as a sonic asset. The company also extended its global audience via connection to the music and the video's stories. While the information about the exact return on investment into sonic branding is not easily available, it is clear that the company is willing to continue such investments.

3.2   The McDonald's Corporation

Another company to benchmark for sonic branding practices from the Interbrand 2014 list top ten is The McDonald's Corporation (http://www.aboutmcdonalds.com/mcd/country/map.html). The McDonald's Corporation uses sound and music in their advertising campaigns and in a soundscape in their restaurants.

An example of such sonic branding is their widely known jingle, which is also often used in their campaigns. The jingle consists of five notes and a short phrase: often sung as: "Ba-

da-ba-ba-bah, I'm loving it" (https://www.youtube.com/watch?v=bM_FTMatWJo). This jingle is actually the refrain of a commissioned song by The McDonald's Company. The actual song, "Im loving it", was recorded by Justin Timberlake, and written by inter alia Pharrell Williams (https://www.youtube.com/watch?v=-IHcp8PI_X4). The song didn't do very well, yet the refrain proved a very valuable sonic property. Also, the "I'm loving it" campaign is the first McDonald's campaign that lasted longer than four years (Moran, 2014) (Rap Genius, 2003).

Another example is the soundscape they create in their restaurants around the world. Kajsa Dahlberg, Head of Media and Digital for McDonald's Sweden, explains how in their cooperation with Spotify, they deliver custom playlists for the restaurant chain in Sweden. The playlists contain a selection of current songs played on mainstream radio. The choice of the music is also adjusted for particular times of the day, so that the music is turned up both in "volume and beats per minutes during busy periods to move people more quickly through the restaurant." (Sountrack your brand)

In both McDonald's cases, The McDonald's Corporation also used custom sound and music for their campaigns. In the first world-wide McDonald's campaign, the "I'm loving it" jingle appeared in 120 countries in more than 20 languages (Moran, 2014). Again, while the information about the exact return on investment into sonic branding is not easily available, it is clear that the investments that the company has made have proven to be very valuable, and they will very likely continue this strategy.

3.3 Mercedes-Benz

Mercedes-Benz is another brand in the Interbrand 2014 top ten that deserves attention for its sonic branding. Mercedes-Benz, just like many other automobile manufacturers, makes use of sound and music in their commercials and engineered a signal in their products, for instance, which reminds to wear a seat belt, etc.

Every sound that a car makes nowadays can be traced back to engineering changes that have been made years ago. The reassuring sound a car door makes when it shuts is a good example. In a showroom one cannot hear the sound of the engine or functioning of the car, so the sound of the door closing is the first good impression the car has to make. (BBC Click, 2011)

A recent example of such sound engineering from Mercedes-Benz is the artificial sound that its parent company Daimler AG decided to include in their electric cars. One of the

major selling points of electric cars is their soundlessness. However, people expect some exterior noise as we grew up with the combustion engine sounds. Safety is another reason why Mercedes-Benz will install artificial engine sounds in their electric cars. Pedestrians and cyclists often rely on a car's noise to navigate and in urban areas often cross roads without looking. Thus despite the weakening of their soundlessness selling point, one can understand that Mercedes-Benz is willing to put safety ahead of profits. (Bloomberg News, 2013)(Tschampa, 2013) In a fragment from the British TV-show Top Gear, Jeremy Clarkson tests the Mercedes SLS AMG electric version and compares it with its pertrol equivalent. Also the sound of the electric car is discussed. (https://www.youtube.com/watch?v=5gFGX43vubM)

Another example is the Mercedes-Benz sound logo which was introduced in November of 2007 as part of their new brand image. The logo was based on a recording of an English boy choir from the 1990's, from which sound engineers extracted a boy's vocal solo. In cooperation with Jung von Matt, the three-tone sound logo was created. (https://www.youtube.com/watch?v=X0EB_vl4rik) At the end of 2009 however, Mercedes-Benz stopped using the sound logo. Mercedes-Benz's head of marketing Anders-Sundt Jensen claimed that their analysis showed that "the brand Mercedes-Benz is strong enough without one". According to Illner (2010), this reflects how little sonic branding is understood, and that Mercedes-Benz did not create their sound logo efficiently in the first place. (Free, 2008) (Illner, 2010)

Mercedes-Benz is not the only automobile manufacturer that installs artificial sounds in their products, yet their sounds are custom engineered. As for the sound logo, they did not commission the sonic asset. Once again, while the information about the exact return on investment into sonic branding is not easily available, it is clear that the brand will continue its investment in the sound engineering that is used in their products. Additionally, reintroducing investments in sonic properties as part of their brand strategy would boost its brand image.

4 Empirical part

This chapter will concentrate on how the research has been conducted throughout the thesis process. First, the research methods and the data collected will be discussed. Then, the Wondersound workshop will be presented.

4.1 Data collection

Chapter 2 focuses on the analysis of both words that make up the term sonic branding, and is mainly covered through literature review and desktop research. As sonic branding remains a branding tool, the term branding has been analyzed first and mainly through literature. Afterwards, the physical and biological properties of sound and how we process sound were researched through some literature, yet mainly through desktop research.

The **literature review** shows that a brand is an emotional belief that is created by consumers of a product through interacting with its tangible and intangible properties, a belief that is shared with others and that can be protected by copyright law. The equity of such brand refers to the added value that a recognizable brand creates for the brand owner and the brand consumer. In Aaker's Brand Equity Model, brand awareness and brand association are the most important factors of brand equity. The identity and the image of a brand are both related to its positioning; the difference is found in the point of view of the brand message. While brand identity refers to how the brand communicates its beliefs and values to customers; brand image refers to how the consumers perceive and interpret those beliefs and values.

The **desktop research** shows that sound is a much underrated sense in the branding industry. Sound is a wave that is created by a vibration and which travels through a medium, such as air. A sound wave's frequency is expressed in Herz (Hz) and its intensity in Decibels (Db). The human ear can pick a sound wave and, through its three parts of the ear, translate the vibration of that wave into a nerve impulse that goes to the brain, which results in hearing. Sound and music can be linked to memories in the brain, allowing people to relive moments from their youth and helping people living with Alzheimer remember things from the past. Music also creates mental imagery which can serve as a survival advantage, yet can also appear in the mind as an earworm. An earworm is a form of mental state whereby a part of a song or a tune gets stuck in one's head as if in a loop.

These results are enough evidence that sound can be a very valuable factor in branding. The desktop research further shows that sonic branding is the process of brand development and brand management by use of audible elements within the framework of

brand communication. There are many touch points and ways to communicate a brand message through sound. Although 97% of companies think sound and music can enhance their brand, most do not know what they sound like and/or actively make use of sonic branding. The traditional approach to make a sonic brand asset, used by agencies, usually includes studying the current sound(s) used by a company, and then take advantage of that sound or create a new sound to work towards a goal. Tom Bergmans created an app that can calculate if a song will become a hit or not. However, the recipe to making a hit song is still unknown.

Additionally, to provide some examples to back up the theoretical framework, a short **benchmarking** was conducted. The benchmarking consists of an analysis of three international brands that are all ranked in the top ten of best international brands 2014, according to Interbrand. The data in the benchmarking has been collected through desktop research. The benchmarking gives two examples of sonic branding practices per company, most of which are also known world-wide.

These results from the literature review and desktop research helped design the **interviews** that have been conducted: CEO of an advertising agency and Vice-President of Helsinki Pop & Jazz Conservatory. The CEO of a radio station and several brand managers were also contacted but where not available for an interview.

The first interview was held over the phone with Nicholas Blasband, owner of *Flyflyfly* and *Ice Hockey Drink*, in March 2015. The goal of this interview was to get some insights on sonic branding from someone who has experience in the industry. Blasband considers sound and music as important factors in a branding strategy, as they are recognizable and trigger emotional responses. This aligns perfectly with the results of the desktop research in section 2.2.3. However, Blasband feels that the phenomenon of sonic branding is made to look more important than it is. He believes that if you take a tune and people hear it enough then they will recognize it and associate it with the brand, but if you overdo it people will get annoyed: "Repetition is key, yet with a limit". This was an interesting new point of view on sonic branding that was introduced into the research.

The second interview was held face-to-face with Juha Kataja, Vice-Principal at Helsinki Pop & Jazz Conservatory in May 2015. The goal this time was to get some insights on the physical anatomy of music and how to make a catchy tune. Music was discussed first and the main outcome was that most songs and even tunes follow a "AABABBA" rhythm and a 120(60) tempo. We also discussed the impact of sound on the brain, earworms, and how

to create a recognizable tune. The main conclusion here is that the recipe for a hit song remains a million dollar question, as already stated in section 2.4.2.

Next, the Wondersound workshop will be presented.

4.2 Wondersound workshop

My summer 2015 internship place also agreed to commission this thesis. As part of this thesis, the "Wondersound Workshop" was created for the *gardeners* during the internship period. In this workshop the findings of this study have been presented in an interactive way, with visuals, videos, a sound quiz, and a group task at the end. The presentation slides of the workshop are attached as Appendix 1.

4.2.1 General information

The workshop was held on Friday 3 July 2015, at 15:00, at the Wondergarden office (the outdoor terrace). Seven persons, including the author of the thesis, attended the workshop.

As the internship took place in an advertising company, the colleagues were fully aware of the branding process and the theory behind branding; hence the workshop was focused more towards the sound recognition and sonic branding parts.

The experience with sonic branding of some colleagues was more focused on the sonic logo and advertising sound. A sonic logo quiz was organized and the phenomenon of the earworm was introduced, because an earworm is a short catchy tune stuck on a loop in your head, and a sonic logo aims to be just that.

Rather than lecturing this study's findings, the workshop was held in an interactive manner, which made the atmosphere much nicer and allowed the participants to introduce their view on sonic branding at the same time.

The next section will present how the workshop was structured.

4.2.2 Structure

The general details of this thesis were introduced first: how sonic branding as a topic was chosen and how the focus developed.

Then, together, sonic branding was defined and the statement that most people see sonic branding as the sound a business makes, was confirmed. The important factor that the strategic use of the sound of a company is as important as the creation of it, has been added to the definition.

The Sound Agency's Brandsound diagram was presented and then the different types of sonic properties were explored and discussed. Also, examples of such sound assets that have been made by Wondergarden came up in the discussions.

The participants then guessed some statistics of the Heartbeats International survey, which were then compared with the actual survey results.

Consequently the participants had to guess eight sonic logos. The logos in question were Nokia, McDonalds, T-Mobile, Intel, Apple Macbook, BMW, 20th Century Fox, and Xbox360. Each tune was recognized, but not all were matched with the right business.

The chapters about the physical and biological properties of sound and the impact of sound on the brain were mentioned, yet not explained in detail.

The benchmark has been presented with the two examples per case, just as in this thesis. Each case contained both visual and audible elements such as pictures, audio files, or videos.

As part of the internship, one of the tasks was to come up with a sound for Wondergarden by the end of the intern period. Following the traditional approach, a sonic audit of Wondergarden was conducted at the end of the workshop, for which the group was divided in two teams.

4.2.3   Feedback

The colleagues were asked to fill in a short survey after the workshop, see appendix 2. Table 1 below gives an overview of the answers. The table is the same as on the questionnaire and shows the number of answers for each score. The grades go from 1 to 5; 1
being the lowest and 5 the highest.

	1	2	3	4	5
The workshop was interesting	-	-	-	1	5
The workshop was well structured	-	-	1	5	-
The workshop was usefull	-	-	-	2	4
The topic is timely	-	-	1	1	4
The topic is relevant to Wondergarden	-	-	-	-	6
The information was clearly presented	-	-	-	4	2
The presentation slides were well structured (text, visuals, …)	-	-	2	4	-
I learned something new	-	-	1	3	2

Table 1. Wondersound workshop feedback

Table 1 above shows that each question had a minimum score of 3. The score of 3 has not been given more than two times for one question. In general the scores are all quite high, with an average of 4,4.

Also three open questions were asked: namely if the participants' views on sonic branding changed from before the workshop, three points they remembered from the workshop, and what they liked most in the workshop.

The two founders and partners of Wondergarden, also the internship supervisors, stated that although they have not learned much new during the workshop, they have been reminded of the importance of sound in branding. Other colleagues reported that they did **learn something new** and now had a better understanding of sonic branding than before. Introducing the theory behind sound and recognition also gave them a much broader view of sonic branding.

Three points remembered from the workshop resulted with: "interactive", "the cases", "fun quiz", "recognition and Alzheimer", "McDonalds tune = song with Justin Timberlake", "structure of sound", "branding survey in Sweden", "repetition", "earworm", "guess the brands", "8 aspects of Brandsound".

The interactive presentation style and the sonic logo quiz were the **favorite parts** of the workshop. The benchmarking examples were also much appreciated.

5 Conclusion

The findings of this thesis are important for the commissioner as they need to have up-to-date information and a well-informed team that can communicate the importance of sonic branding to their customers.

As the employees have a background and experience in branding, the theory of brand is likely less relevant and serves more as a reminder. The physical and biological properties of sound is also less relevant to their everyday work. However, as the feedback of the workshop showed, they did not know as much about the theory behind sound, and mainly recognition. However, these two sections lay out the foundation for sonic branding. The feedback of the workshop also showed that they understood sonic branding better and had a broader view of sonic branding as a whole.

The sections on sonic branding and how to make a recognizable tune, as well as the benchmark were the most relevant to Wondergarden. The most noticeable practices across industries were discussed and backed up with examples of sonic branding practices of industry leaders in the benchmark. "How to make a recognizable song" would be the most interesting information for Wondergarden, since they could utilize that in their projects with clients. Unfortunately the answer to that question remains a mystery. However, the study by Tom Bergmans, the research by Henkjan Honing, and the traditional approach by agencies lay out some guidelines to make a recognizable song with the information known so far.

5.1 Reliability and validity

The theoretical framework of the study is reliable as similar results would arise if the same study were to be done again or by someone else using the same techniques. The study can also be considered reliable, as many opinions and facts from different sources align or even complement each other. However, the study could be more reliable and establish a broader view on sonic branding if more industry leaders and experts participated in the interviews.

Also the workshop is reliable since the same workshop for a similar audience of advertising professionals would result in similar feedback. Employees working in the advertising sector mostly have a background and/or experience in branding, yet learn something new and/or get a broader view of the use of sound in branding, as presented in this study and workshop.

For the benchmarking all available information has been utilized, however the reliability of those sources could not always be verified. A company's branding should be consistent, yet this is not always possible since advertising practices might differ in various geographical locations.

The study is valid since it provides sufficient answers to the research questions:

The first research question this thesis attempted to answer was "What is sonic branding as a phenomenon?" In short, as stated in the results in section 4.1: sonic branding is the process of brand development and brand management by use of audible elements within the framework of brand communication. This is a two-fold action of creating the sonic asset, as well as the strategic use of that sound. This is supported by the benchmarking examples.

Secondly, this thesis researched "Why do certain sound patterns become "earworms" and with that support the brand?" In short, an earworm is a form of mental state whereby a part of a song or a tune gets stuck in one's head as if in a loop. Unfortunately, the answer to why tunes get stuck in our head is still unknown.

Finally, the question "What is the process behind creating assets of sonic branding?" has been discussed with an example of the traditional approach that advertising agencies usually follow. The process on how to create a sonic branding asset has been described; however, there are no clear guidelines as to how to create recognizable sonic properties and the recipe for a hit song is still to be found. The thesis does not elaborate on the decision-making, the costs, the production time span, etc. behind making sonic assets.

5.2 The contribution of the thesis to university research and suggestions for future research

The thesis stands out from other theses at Haaga-Helia University of Applied Sciences and other Universities in general since it covers a topic that has not previously been explored. This thesis contributes to university research in the following ways.

The theoretical framework lays out a foundation for sonic branding by analysing the terms branding, sound and even further topics such as memory and recognition, earworms, hit making etc. Thus, the thesis provides a framework for understanding sonic branding as a whole.

The thesis provides up-to-date information about music and memory research. Also the search to the recipe for making a hit song is explored.

The thesis provides an overview of the most noticeable practices across industries with a benchmarking of three companies that are ranked in the Interbrand top-ten list of world's best brands 2014. The benchmarking gives two examples per company that have been analysed in-depth.

This thesis only scratched the surface of information about sonic branding.

Personal suggestions for future research would be to study the effectiveness of sonic branding as part of a branding strategy. Similar as in advertising it will be tricky to calculate the exact return on investments as it is difficult to link sales directly to sonic branding.

Another suggestion for further research would be the combination of senses such as sight and smell, sight and hearing, etc.

Another suggestion could be to develop the topic of music and memory, and hit making.

5.3   Learning outcomes

Being a performance driven person, I strive to complete tasks to the best of my abilities. At times working without specific guidelines can be difficult, as often new ideas emerge that may change my focus. What started with sonic branding in general soon involved topics such as sonic logo, earworms, music and memory, music and the brain, how to make a sonic property, how to make hit songs, etc.

I learned a lot about sonic branding, and due to my curiosity I went much deeper and much broader and learned a lot about other aspects that form this interesting industry. I did not have a clear plan when starting my research because sonic branding is a timely topic that is still quite unknown. Hopefully this thesis can change that and create awareness of the importance and relevance of sonic branding.

I started thinking about a topic in the fall 2014 semester, as a part of the free-choice course "Thesis Writing". The Media Coordinator of Wondergarden, the company where I would do an internship in summer 2015, mentioned sonic branding. I decided to develop the idea of sonic branding and create an initial thesis framework in the thesis writing

course. In December 2014, the thesis research began with the literature review of the book "Sonic Branding: an introduction" by Daniel M. Jackson, and several articles online.

After starting the thesis process in January 2015, the focus changed several times. I got interested in the sonic logo, which I researched and then led to the earworm, the impact of sound on the brain and memory, how to make a memorable sonic property, etc. Together with the commissioner the decision was made to create a framework for understanding sonic branding and an overview of the best practices across various industries, including all previously mentioned focuses. Additionally, a workshop for the company's employees would be held to present them with the research results.

Months of research and work went into this thesis, yet the time invested was more than worth it. Not only did I learn a great deal about the sonic branding industry and was I able to inspire the employees of my commissioning company, I also found an area in which I would like to continue and in which I could potentially conduct research for a future Master thesis.

To conclude, sonic branding deserves to be seen as a highly valued branding tool. With the marketing landscape polluted by advertisements and selling messages, sonic branding can help a business stand out and focus a customer's attention. Since sound and music are often linked to memories, a business can influence a person's feelings about a brand through music. Furthermore, when creating sonic properties, a business can investigate its brand from different angles and learn new sides of its brand image. Investing in a sound library does not require additional licensing for the use of external music or sound and brings valuable assets to a business. The strategic use of sonic properties will allow a brand to sound coherently at every touch point with customers and stakeholders. Despite the above, the audible aspect of brand identity is a very underrated and powerful tool.

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Appendices

Appendix 1. Wondersound workshop slides

The slides from the workshop

How to

- Hit songs
  - Tom Bergmans
  - Henkjan Honing
- Traditional approach
  - Sonic audit
  - Strategy
  - Creation
  - Testing and refining
  - Implementation

Hit Songs

- Tom Bergmans
  - Hit recognition app

- Henkjan Honing
  - Hit song recipe

Benchmark – Coca Cola

- Commission own songs
- Campaigns inspired on the happiness of sharing
- Some songs have been hits

World Cup 2014

Inspirational campaign

Benchmark – McDonald's

- Commissioned song (Justin Timberlake) – refrain end up more popular than the song itself

- In-store sound in cooperation with Spotify

Benchmark – Mercedes-Benz

- Product sound: example engine sound

- Sound logo (2007-2009): "The brand Mercedes-Benz is strong enough without one" – Anders-Sundt Jensen, head of marketing

Sonic audit

- Step 1 of the traditional sonic branding approach
  - Where are we now?
  - What sounds do we produce already?
  - On which touch points do we create a sound?

- Team 1 vs team 2 – Wondergarden sonic audit

Appendix 2. Wondersound workshop feedback

	1	2	3	4	5
The workshop was interesting					
The workshop was well structured					
The workshop was usefull					
The topic is timely					
The topic is relevant to Wondergarden					
The information was clearly presented					
The presentation slides were well structured (text, visuals, …)					
I learned something new					

My view on sonic branding changed from before the workshop:

....
....
....

Three points I remember from the workshop:

....
....
....

My favorite part of the workshop was:

....
....
....