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The different roles of a brand for purchasing reused materials in B2B

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Abstract: There is a growing trend of circular economy within the B2B sector and limited research has been conducted regarding the role of the brand in this setting. This paper focuses on purchasing experiences of reused materials in the construction industry. With the use of a case study, including qualitative interviews with the chain of actors of the construction company Brukspecialisten AB, this research highlights the different roles that a brand can have for purchasing reused materials. Based on the study, three key roles of a brand are found to be beneficial: the consultative feature, coupling of internal values and brand reputation. Through previous literature and our findings, we propose a new theoretical framework called ‘circular branding’. Finally, managerial implications and future research are recommended.

Key words: Brands, business-to-business (B2B), circular economy, purchasing, reused materials, circular branding, construction industry

Introduction

This study is about the role of the brand for purchasing reused materials in a business-to-business (B2B) context. Reused materials are important for a transition from the traditional ‘take-make-waste’ model to a circular way of doing business (Singh & Giacosa, 2019). One way of moving towards a sustainable industry is by integrating circular economy (CE) principles into business practices in order to “achieve workable relationships between ecological systems and economic growth” (Nasir, Genovese, Acquaye, Koh & Yamoah, 2017, p. 443).

The construction industry is considered to be a very traditional industry and generates a substantial amount of waste (Nasir et al., 2017). This indicates that changes must occur, where the construction industry has major polluting issues that need to be dealt with. With many cities and communities forming sustainability goals, it gives companies in this industry incentives to further develop a circular mindset to adapt

to the community in which they are operating in (Katz, 2020, September 16th). Hence, there is a growing interest and nevertheless increasing importance of moving towards a circular society, regardless of what industry is being discussed.

A professional within the construction industry has commented on the need for customers and property owners to precede in the use of reused materials, and the need to view demolitions as a way to provide a new circular flow of materials is emphasized. This mindset is necessary in order to change regulations, a prerequisite for enabling more building materials to become circular (Steen, 2021, February 22nd).

There is a research gap regarding brands and CE in the construction industry, as most literature focuses solely on the connection between CE and construction industry. Literature on the topic excludes the importance of brands, although it has been claimed that brands are effective in the

purpose of “bringing sustainable markets to life” (Lehner & Halliday, 2014, p. 30). It is therefore of great interest to investigate the role of the brand in this industry in regard to CE.

It has been argued that there is a need for case study research regarding brands with a focus on sustainability (Lehner & Halliday, 2014). Moreover, the use of branding can be utilized for the purpose of educating and influencing people about CE principles has been proposed for future research (Hopkinson, Zils, Hawkins & Roper, 2018). This creates an urge to investigate how a firm with incorporated circularity can brand themselves in an otherwise linear and non-circular market.

For decades, branding has been perceived as effective only in a context where the emotional values of brands are well received. Branding efforts have overall been focused on consumer markets, both throughout literature and in practice, meanwhile branding has been perceived as irrelevant in a B2B context, due to the nature of B2B being generally based on rationality. This means that branding has been disregarded within marketing towards other businesses. (Gomes, Fernandes and Brandão, 2016).

The small amount of research that has been conducted regarding B2B branding shows that branding is necessary in both market types, since brands work as a way for customers to gain trust and thus create bonds with suppliers. Potential benefits for B2B companies when using branding is therefore to gain higher demand, make loyal customers and differentiate themselves (Leek & Christodoulides, 2011). Thus, by being authentically brand oriented, “an organisation receives the greatest benefits in terms of profits” (Gromark & Melin, 2011, p. 408). However, Gomes et al. (2016) argue for how unclear and, essentially unresearched, the role of brands is within business markets. Therefore, this

study further investigates the brand’s role in B2B through case study research in order to add knowledge to the subject.

The research in this paper is based on a case study of a Swedish construction company and actors involved in their projects, with a focus on supply of reused materials. Thus, in order to fill the gaps that exist in previous research, this thesis aims to describe experiences of purchasing reused materials in the construction industry. Further, this study will lead to the development of a new theoretical framework which will be referred to as ‘circular branding’, a concept that has not yet been investigated. In order to do so, this study will strive to answer the following question: What is the role of branding for purchasing reused materials in B2B settings?

The thesis is outlined as follows. First, the literature review will be presented, covering the topics of B2B branding, the brand’s effect on B2B purchasing and B2B circularity. Second, the method section goes through how the study has been conducted, the analysis method and a description of the case company. This part also includes a model for our chain of actors which has been developed based on the empirical data. Third, the findings will follow, with a description of the most valuable insights from the interviews. Fourth, a discussion is made with connections drawn between previous literature and the findings. Lastly, a conclusion with managerial implications and suggestions for future research will be presented.

Literature Review

This section will present relevant theories, previous research and concepts regarding business-to-business (B2B), branding, purchasing and circular economy (CE).

B2B branding

A general perception is that branding is not as relevant within the B2B context as it is for B2C, however, brands indeed have both functional and emotional features and offer a unique experience for the customer in B2B (Cassia & Magno, 2019). Generally, branding is beneficial to companies due to how brand oriented organizations receive the greatest benefits regarding profit-making (Gromark & Melin, 2011). So how do we define brands? A general and widely accepted definition is to see brands in terms of a “name, term, symbol or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors” (Louro & Cunha, 2001, p. 856; American Marketing Association, 1960, p. 8).

Benefits for the customers within B2B when branding is utilized, is that they engender e.g., higher confidence, risk reduction and increased satisfaction, meanwhile the seller/supplier e.g., gains a higher demand, differentiation, loyal customers, referrals and distribution power (Leek & Christodoulides, 2011). This therefore shows how much branding affects businesses and the potential benefits it brings along. Thus, despite the end-customer not being the same one as in B2C, the benefits of branding are clearly visible in B2B as well. Branding in the B2B context has a significant impact, such as perceived quality, and can provide the brand with a unique identity in comparison to other businesses (Leek & Christodoulides, 2011; Cretu & Brodie, 2007). It is further used as a way of proving the firm’s reputation to future customers, and intangible attributes to a firm may be more important than tangible ones (Mudambi, 2002). This means that the reputation can serve as a tool to reduce perceived risks and uncertainty from the buyer’s end (Leek & Christodoulides, 2011).

Branding within a B2B context differs from B2C, not only because of the customer differences, i.e., targeting companies versus individuals, but also since the B2B customers are fewer and larger than the ones within B2C. Industrial B2B companies also often have thousands of products, which B2C companies often do not have, and this has been claimed by some to make branding into less of a value in such a context (Leek & Christodoulides, 2011). Similar is however that both of the business types have “to engender trust and develop both cognitive and affective ties with stakeholders” (Leek & Christodoulides, 2011, p. 830). This therefore means that branding is also important in B2B, although there has not yet been much research on the topic (Leek & Christodoulides, 2011).

Further, a central context in this study is the construction industry, which is largely a traditional industry that focuses on the development of for instance buildings, properties and bridges. Regarding building contractors, Gomes et al. (2016, p. 202) claim that “the products they deliver are not unique, as other companies also have the capacity to manufacture identical buildings and constructions”. The authors therefore highlight how B2B firms can gain competitive advantages through branding their products.

Mokhtariani, Sebt and Davoudpour (2017) explain how construction companies are involved in both relationship- and transaction-based activities, as a way to brand their products, which is necessary for the development of businesses. Relationship activities are crucial for an industry that is driven by projects, as good client relationships create larger chances for new projects with these particular clients. Further, in a complex industry such as the construction industry, the relationships towards regulators and politicians become essential in trying to resolve environmental obstacles in projects. This further indicates how vital it is to keep a relationship with all

sorts of clients. Moreover, transaction-based activities, which is also referred to as marketing-mix related activities, promotes the brand (...) image of the company” (Mokhtariani et al., 2017, p. 11), and increases the project profitability. Thus, in regard to the marketing, most construction companies should use several kinds of marketing, fitting the different activities, due to the construction industry being project-driven and due to the users within this industry being different than users within other industries. Moreover, Raharjo and Eriksson (2017) explain how it is essential to understand differences between various customers. It is important to take into consideration how private and public organizations as customers are different from each other, “concerning the source of financial resources, ownership, and model of social control” (Raharjo & Eriksson, 2017, p. 1795), meaning that their characteristics influence their way of doing business. Hence, there is a necessity for construction companies to have separate plans for each marketing field and thereafter allocate the resources needed (Mokhtariani et al., 2017).

Brands’ effect on B2B purchasing

Although branding matters even in a rational and functional B2B context, some people within organizations may be more or less receptive to such information (Gomes et al., 2016). Something that is essential when having companies or organizations as customers is how purchasers are professionals constrained by budgets and motivated by profit-making (Leek & Christodoulides, 2011), and the purchase has a purpose of enabling further production for the customer (Van Weele, 2018). A good first step is therefore to understand how they think and what their purchasing processes look like (Leek & Christodoulides, 2011). For example, within the construction industry, there is much focus on the price of procurements within purchasing processes rather than innovation and quality, which indicates that

the cheapest offering often wins (Stern, 2011). This is especially applicable for public customers who are constrained by procurement laws, such as the Swedish Public Procurement Act (Konkurrensverket, 2016). This indicates how critical it is to understand which buyers and what actors are more receptive to information about brands, in order for brand building efforts to be valuable for organizations (Gomes et al., 2016).

Bildsten and Manley (2015) have developed a framework for understanding purchasing, specifically within construction companies and building constructions. Within the early stage of ‘identifying purchasing alternatives’, users, influencers and purchasers have active roles. *Users* can in this case either be the end-user of the construction, the client that initiates the construction process and sets specific requirements for the construction, or both; the *influencers* are people that directly or indirectly influence the purchase decisions; and *purchasers* are the ones who have authority for selecting suppliers and making the purchases, however their choices may be limited by the influence of others. Within the supply chain, the client, designer, supplier and project team are involved. Later, in the ‘evaluating alternative purchasing actions’ stage, users, influencers and purchasers take active roles, and throughout the supply chain both the client, designer and project team are involved. Lastly, regarding ‘selecting the supplier’, both users, influencers, purchasers and deciders take active roles. In later stages of the purchasing process, it is only the purchasers and the project team that are involved in the purchasing, since the decision regarding what supplier to use has already been made (Bildsten & Manley, 2015).

Similarly, Gomes et al. (2016) argue that top directors are in general central in the buying process, since they manage information, and therefore, tend to be more

sensitive to brands. However, purchasing managers consider more functional and less emotional and intangible aspects of brands. The authors further argue for how brand reputation within B2B is a competitive advantage since “customers perceive companies with a good reputation as more credible and trustworthy and as providing greater value” (Gomes et al., 2016, p. 201). Brand reputation further aids the customer in reducing risks associated with new projects where the customer has little to no prior experience in, which in turn can induce feelings of positivity and motivation (Gomes et al., 2016).

B2B circularity

There is no doubt about the detrimental climate changes that are occurring and the need to deal with these issues before it becomes irreversible. Lehner and Halliday (2014) argue for how brands can be used as a tool to incorporate sustainability in various markets, thus bringing it into the core of businesses. This brings us to the concept of circular economy (CE), which is a result of the world trying to change unsustainable practices towards more circular ones. CE can be defined as “an economy constructed from societal production-consumption systems that maximizes the service produced from the linear nature-society-nature material and energy throughput flow” (Korhonen, Honkasalo & Seppälä, 2018, p. 39). Thus, unlike linear “take-make-waste” models (Preston, 2021; Singh & Giacosa, 2019, p. 921), CE provides a new way of doing business where economic growth is no longer coupled to environmental pressure, but rather it is encouraging reuse, repair and renewability that leads to an increased longevity of materials (Singh & Giacosa, 2019). This can involve turning end users into suppliers of material and component parts of a product (Martin & Schouten, 2012).

Moreover, Singh and Giacosa (2019) explain that what often decides whether

circularity will be successful or not is much dependent on the amount of certain cultural, psychological and sociological human behaviors. Regarding the rather traditional construction industry, it has been claimed that it is responsible for both “global solid waste generation”, “high-energy consumption” and “resource depletion” (Nasir et al., 2017, p. 444), and some construction companies with high emphasis on sustainability face problems trying to reach out to potential clients. One issue affecting such companies is procurement laws and rules that sometimes inhibit innovative and sustainable offerings from being purchased (Stern, 2011). Hence, it may be harder for certain industries or companies to reach out to their target group with a circular business than it is for other industries or companies, much depending on behavioral and economic factors of the target groups (Singh and Giacosa, 2019).

However, according to Varnäs, Balfors & Faith-Ell (2009), as customers look for what construction company to work with, they put great emphasis on environmental concerns in their procurements. Green procurement preferences are therefore by some companies formulated as environmental requirements within construction contracts, although this often refers to so-called basic environmental requirements, meaning deprecatory of products including dangerous substances. Simultaneously, there is a difficulty in evaluating environmental impacts for purchasers, simply since there are not many useful methods for this purpose, making it hard for purchasers to know if projects fulfil the set requirements (Varnäs et al., 2009). From January 2022, all contractors that have built new constructions will have to perform a climate declaration, in which the information regarding climate effects from constructions get transparent. This is in purpose to decrease the effect that the construction and real estate industry has on the climate (Boverket, 2020, December 28th).

Circular branding

Hopkinson, Zils, Hawkins and Roper (2018) have argued for how marketers need to do their share and change practices and users' behaviors, in order for the culture to change towards CE. For example, the widespread culture of always buying new has to come to an end in order for a CE culture to work out in society. However, there is no extensive research on the topic regarding branding of reused materials. This is a new concept that we will refer to as 'circular branding' within this study. The purpose of circular branding is to increase the number of purchasers who opt for circular materials. In comparison to B2B branding, circular branding will contribute with an understanding of the brand's role regarding purchasing of reused materials.

Method

As this study aims to describe experiences of purchasing reused materials in the construction industry, the approach for this study was to deeper understand the construction industry through the case of Brukspecialisten AB.

The approach for this study is the use of a case study method and the purpose is to provide holistic and detailed knowledge about the case in question. Case studies were chosen as it enables the researcher to "present complex and hard-to-grasp business issues in an accessible, vivid, personal, and down-to-earth format" (Eriksson & Kovalainen, 2008, p. 116). The authors of the book further continue by arguing for how case studies can aid the researcher to understand how business practices are changing within a context, thus why this approach was chosen for this paper. We believe that the construction industry is changing and therefore it is essential to capture the changes while it is happening. Case studies can further be intensive or extensive, where an intensive form of research lies in the aim of this study

since only one case is analyzed. Eriksson and Kovalainen (2008) describe intensive case studies as "understanding a unique case from the inside by providing a thick, holistic and contextualized description" (p. 118). Brukspecialisten AB can be seen as a unique case in the construction industry since they are the only ones who provide reused bricks as an option for the time being. It is therefore interesting to investigate this case in terms of its uniqueness.

In order for this study to gather relevant information, we decided to approach those who would best have an opinion about the branding of our case company in question. Therefore, it was decided to do in-depth interviews with Brukspecialisten AB's different customers to capture and understand the perceptions from an outside perspective rather than within the company. However, it came to our attention that limiting the study to just customers were not enough. We further decided to expand our research scope to further involve other actors in the chain, i.e., architects and so forth, to get a deeper understanding of the chain of actors in this case. The selection of respondents was made with the help of Brukspecialisten AB who initiated the contact with actors who have been or are currently in a project with reused bricks. The potential respondents were approached on behalf of us by Brukspecialisten AB's market coordinator and other intermediaries within the firm. A short description of the study and its purpose and aim was prepared in advance and attached to the emails sent from Brukspecialisten AB. Interviews were consequently conducted with public and private customers, an architect, a turnkey contractor and lastly a subcontractor. Since the study was limited in time, we had to reach for respondents outside of Brukspecialisten AB's network in order to retrieve the information necessary for the study. We reached out to one of our contacts who works as a purchasing leader at a turnkey contractor firm with relevant

experiences who was happy to participate. This gave us an opportunity to interview someone outside of the firm's network and give us valuable insights. The respondents are presented in Table 1.

The interviews had a semi-structured outline, which made it easier for the us to keep a red thread through the questionnaire by having set themes in advance and giving space for follow-up questions at the same time (Eriksson & Kovalainen, 2008). This type of structure further allows the conversation between interviewers and respondents to be less formal and more relaxed. We prepared themes regarding their experiences with purchasing reused materials, sustainability, branding and Brukspecialisten AB. The interviews were conducted online through Zoom, which allowed for a more widespread range of

customers to be interviewed rather than only limiting those who are geographically close (Eriksson & Kovalainen, 2008). The authors further argue for how online research, such as online interviews, can lead to confidentiality problems and it is essential to address this issue. Because of this, it was important to explain the purpose of the study to participants before scheduling an interview to make sure they understood what they were agreeing to. Anonymity was offered to all respondents if wanted, where out of six interviews, with a total of eight participants, only one person preferred to stay anonymous. However, we later on decided not to include any names in the paper, since it would not have provided any value for the paper. Rather we decided to include the respondents' roles at their organizations, which all respondents had approved. Further, the interviews were

Table 1
Respondents in study

Name of Firm/organization	Title at Firm/organization	Role in Chain of Actors	Duration of Interview
Vasakronan*	Property developer, Consultant	Private Customer	36 minutes
Region Kronoberg	Engineer within energy & sustainability	Public Customer	28 minutes
Sehed	CEO	Subcontractor	37 minutes
Fojab	Architect	Architect	31 minutes
Helsingborgshem*	Project leader, Project manager	Public Customer	28 minutes
Anonymous	Purchasing leader	Not currently involved	35 minutes

**Two respondents were present within the same firm/organization. Both titles are present in table.*

audio-recorded, which allowed for a deeper focus on asking questions and follow-up questions while observing the respondents while they were thinking through their answers. This created a discussion between respondents and interviewers of a relaxed and easy-going character. After the interviews were finished, the audios were transcribed in order to get a better overview of the respondents' answers. By recording and later on transcribing interviews, it familiarizes the interviewers with the material and what was being said (Eriksson & Kovalainen, 2008).

All of the interviews were held in Swedish, and the interview guide was therefore initially written in Swedish and later on translated. This made it easier for the respondents to reflect upon their experiences in their native language and thus easier for us to capture it through the interviews. It is important to note that translations can lose their initial meaning because the languages may lack certain words to explain experiences expressed in the original language (Given, 2008). However, all of the quotes and empirical data have been translated from Swedish to English with carefulness. Another issue that we came across was how the public customers had to approve of the quotes beforehand. This created a rigorous process to select relevant quotes and further analyze it, however there were overall no issues in selecting and getting quotes approved by these respondents in the end.

We decided to not use 'he' or 'she' as pronouns for the respondents since we did not know nor ask what they identify as. In this day and age, gender neutral pronouns are becoming more frequent in academic writing, where 'they' as singular is being more frequently used (Stormbom, 2019). It is increasingly important to bear in mind that not all people identify their gender with their biological sex (Terry, 2017), hence why we did not assume gender of the respondents. We decided to use 'they' as a

singular pronoun in this study since we did not include names of the respondents.

During the study, continuous contact was kept with Brukspecialisten AB via emails and Zoom meetings. The company provided us with materials about the company, such as insights about the target group, challenges and so forth. In the early stages of the study, meetings were held with the CEO and market coordinator about the focus of the study. It was important to discuss what the firm expected from our study and how it could be useful for them in the future. Hence, it was important for us to keep a dialogue with Brukspecialisten AB and to keep them in the loop of the process and in what direction the research was heading. In summary, the total amount of time spent interviewing and discussing with Brukspecialisten AB through Zoom was approximately three hours. Moreover, continuous mail contact has been kept throughout the process, where we could ask questions, exchange ideas and update them after each meeting with our supervisor.

In order to analyze the materials, a thematic analysis was chosen for this study. Themes can further be characterized as "a concept, trend, idea or distinction that emerges from the empirical data" (Eriksson & Kovalainen, 2008, p. 219). It further aims to help the researcher to capture certain meanings that are connected to the research question (Willig, 2014). From the empirical data, three different themes were distinguished based on the respondents' experiences with purchasing of reused bricks. The themes are presented in the next section where we present our findings.

It is of great importance to consider the trustworthiness of our study with the aim to make conclusions and implications based on the empirical data and literature review. One way to evaluate a study is through trustworthiness which consists of four key aspects. First, we are looking at *dependability*, which stresses the concern of

the researchers being responsible about the information that is being offered to the reader (Eriksson & Kovalainen, 2008). Since the interviews were recorded, we could more easily document and trace the empirical data through the recordings, and therefore we could ensure that the information presented is more reliable. Second, we look at *transferability*, which covers the responsibility we have as researchers to show “the degree of similarity between your research (...) and other research” (Eriksson & Kovalainen, 2008, p. 294). Our findings are to a big extent detectable in other research and confirm findings from previous research. Continuously, *credibility* is the next aspect to take into consideration when evaluating the trustworthiness of our study. This revolves around how familiar we, as researchers, are with the topic, if the collected data is sufficient and if other researchers can come to similar conclusions if they were to use our materials (Eriksson & Kovalainen, 2008). We strongly believe that we have collected the right amount of material during this research period to support the claims made in this study. This is based on the empirical data starting to repeat itself towards the last interviews, where similar answers and patterns were identified. Lastly, *conformability* refers to the interpretations of the findings being easy to understand by others and are “not just imagination” (Eriksson & Kovalainen, 2008, p. 294). The findings in our study are solely based on theoretical connections to the empirical data from interviews, which aims to understand the experiences of purchasing reused bricks. Hence, it is based on real-life examples and is thus a representation of reality.

Case

Brukspecialisten AB is a Swedish specialist chain within the construction industry, providing services and solutions for masonry and plaster. The company owns professional shops around the country and a newly established brick beam factory. By

providing clients with technical and aesthetic help from project salesmen and constructors in an early stage, the projects are set up to be cost-effective and sustainable (Brukspecialisten AB, 2021). Also, within the brand *Brukspecialisten Tegel*, there is a focus on a circular business model, providing clients with qualitative reused bricks which thus retrieves a prolonged life and multiple life cycles through demolition and reconstruction. Moreover, the company provides the guarantee that all their brick facades can be dismantled and reused (Brukspecialisten Tegel, 2021a). As bricks are delivered to Brukspecialisten AB, they are booked by the customer who has demolished a building and wants it back for a new construction. The bricks can also come from realized demolitions without being booked for other construction projects (Brukspecialisten Tegel, 2021a).

Reused bricks and pricing

The reused bricks are disassembled from old buildings and made into new bricks that have the same guarantees as newly produced bricks. Through a patented purification technology, the company cleans the old bricks. They are then controlled and sorted, as a way to prepare them for reuse (Brukspecialisten Tegel, 2021b). The bricks are often disassembled from old buildings from the years between 1800 to the 1960's, and they have mostly been burned in ring ovens and gained high quality, as well as a great natural color. This makes them able to be reused, in comparison to many of the more modern bricks that are used within constructions today. The bricks are all of different colors and looks, however, they all have the same quality (Brukspecialisten Tegel, 2021b).

According to Steen, the CEO of Brukspecialisten AB, the pricing of the reused bricks can differ. Either it is in line with average prices or in a higher price span, in comparison to newly produced bricks. However, when comparing the price

of reused bricks to newly produced bricks, the pricing of the reused bricks is sometimes misleading due to the many different formats that are provided on the market. Therefore, Brukspecialisten AB has decided to use prices per square meter. So, in comparison to newly produced bricks, which on average cost about 450 SEK/sqm and at most 700 SEK/sqm for highly priced ones, reused bricks cost between 550 SEK/sqm to 700-800 SEK/sqm at highest (Steen, personal communication, February 1st, 2021).

Supply chain and actors

Brukspecialisten AB have further highlighted that their main target group consists of two groups: *customers* and *architects* (Steen, personal communication, 2021, February 1st). The customer is the one who is going to utilize/own the building in question and is the one initiating a construction project. Moreover, depending on if the customer is a public or private company, they usually have different incentives for why they choose the products of Brukspecialisten AB. If they choose to purchase their reused bricks it can, for public customers, be due to a state responsibility to comply with climate goals, meanwhile the incentive for private companies can be to make decisions based on market demands. Architects help the customer to visualize their ideas and bring forth special documents such as building permits in the initiating processes of construction projects. They are also often the ones picking facade material for the construction projects, making them very important for Brukspecialisten AB (Steen, personal communication, 2021, February 1st).

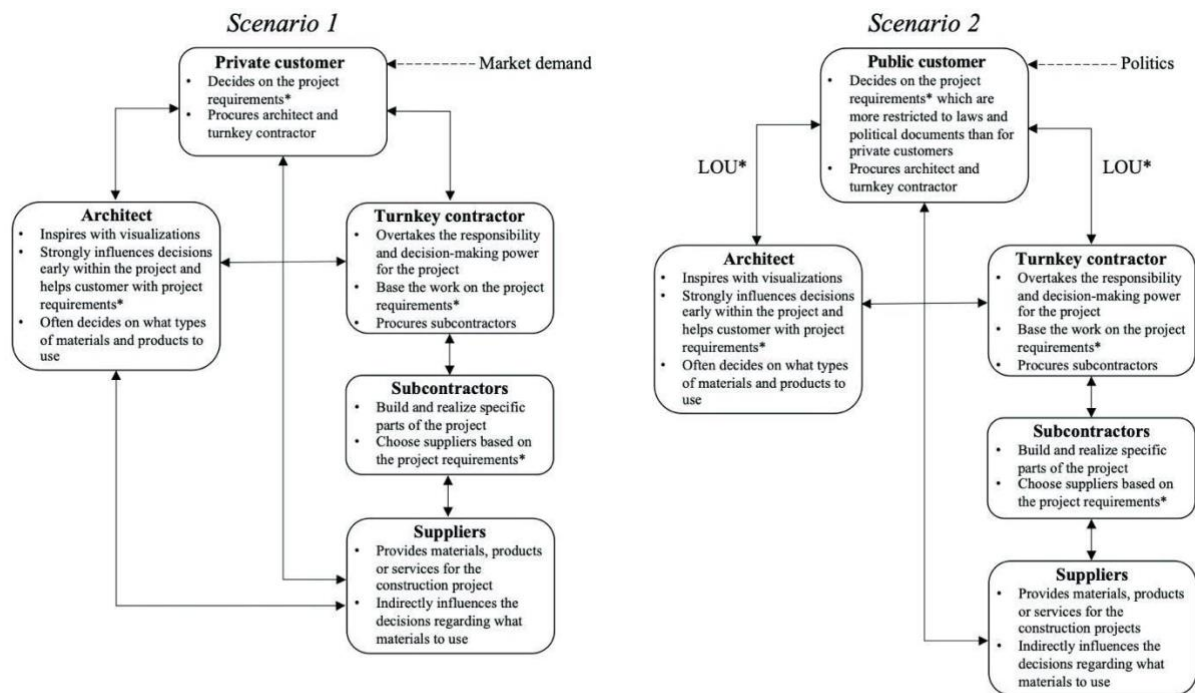
The CEO further demonstrates how important these actors are in their network and the entire supply chain. More specifically, the person who makes the final decisions holds major power in regard to reused bricks. Steen (personal communication, 2021, February 1st)

explains how their customers are in fact the ones who decide whether the bricks will be reused or not when a building is being demolished. They can decide on what is going to be done with the waste that is left, making the customers a vital part of their circular business model. This means that the customer has to decide to reuse the bricks early in the process and this is emphasized by the company. However, private households and consumers are a very small part of their target group, making this context focused on a B2B basis. Thus, among their customers, there is an overrepresentation of public buildings, such as schools, hospitals, and rental properties (Steen, personal communication, 2021, February 1st).

Another actor that is important for Brukspecialisten AB, although not as important as the customers and architects, is the *turnkey contractor*. This is a company, often one of the larger construction companies, that is procured and takes over the total responsibility for the construction project, often after the building permit has been received. They do some preparatory work on the building such as putting up walls, and then they procure *subcontractors* to do more specialized work in accordance with the set contract. However, although they play a big role in construction projects, they are most of the time not as important to target for Brukspecialisten AB as the customer and the architect. This is since they simply follow the decisions made by customers and architects made in an earlier stage, such as decisions regarding what facade material to use (Steen, personal communication, 2021, February 1st).

Chain of actors model

The below visualized scenarios, Scenario 1 and Scenario 2, represent how the chain of actors look like within large construction projects. The information for the upbringing of this model has been withdrawn from the interviews throughout this study, made with actors within Brukspecialisten AB's



*LOU: Lagen (2016:1145) om offentlig upphandling (Swedish Public Procurement Act)
 *Requirements in procurement documents issued by the customer that affects the degree of freedom for the procured suppliers down the value chain

projects which include reused bricks. It provides information regarding what actors are important in construction projects, which roles they have and how they cooperate with each other. The arrows in the model show if they directly or indirectly influence the decisions of other actors within the same projects. Scenario 1 shows what projects with customers within the private sector looks like, meanwhile Scenario 2 shows projects with public customers.

The initiating actor in construction projects is often the customer that is going to utilize and own the building in question. This actor has a vision for where the project is going to end and decides on the project requirements, which affects the degree of freedom for the procured suppliers down the value chain. Moreover, the customer procures an architect and turnkey contractor. The degree of freedom for decisions regarding the project requirements and procurement of suppliers is also more restricted for public customers, which have to do this in accordance with

Lagen (2016:1145) om offentlig upphandling (LOU), the Swedish Public Procurement Act.

The architect is the actor within construction projects that helps the customer visualize their ideas and bring forth documents such as building permits early on in the projects. They are also very familiar with different materials and can therefore strongly influence such decisions. Further, they are often involved in the development of project requirements before the customer procures a turnkey contractor.

As the turnkey contractor has been procured, this actor overtakes the responsibility of the construction project. Thus, on the ground of the project requirements, the contractor makes most of the large decisions on how to move forward and procures subcontractors. Depending on how detailed the decisions made by the customer have been, i.e., the project requirements, the turnkey contractor has limited or not so limited space to make further decisions. This means that in a case

where the project requirements are very unspecific, this actor can make a lot of detailed decisions in the ways that the turnkey contractor prefers to, and the opposite happens in a case where the project requirements are very specific, since the contractor then have to act and adapt the work according to the customer's decisions.

The subcontractors, who are procured by the turnkey contractor, build and realize specific parts of the construction project. In this group of actors, masonry contractors and demolition contractors are included, among many others. They choose suppliers of materials, products or specific services based on the project requirements.

Further, the suppliers provide materials, products or services for the construction project. They indirectly influence the decisions regarding what materials to use and similar decisions. Especially within the private sector, as seen in Scenario 1, they may have a large impact on decisions and act as a creative counterpart for several actors within the project in an early stage of the projects. This is the group that Brukspecialisten AB acts within.

Findings

This chapter will describe what we found through the interviews with six different companies within construction projects in Sweden. Three distinguished themes were developed based on the empirical data. The first theme is regarding the initiation for using reused materials, since this is the basis of the experience revolving reused materials. The second theme touches upon the desired features of projects, and lastly prejudice and future regarding the construction industry is presented.

Importance of initiation regarding reused materials

Throughout the interviews, it was evident how vital it was for the idea of using reused

materials to be brought up early in order to become a reality. This was emphasized by all of the respondents, indicating that the importance of initiation is great. It was further highlighted how there was little to no room to present the idea of reused bricks once the project has been going on for a while. A quote from one of the respondents further explains this issue:

“We've been thinking that we really wanted to incorporate some reused materials in this project and where we could do this. By that point, we had come so far with the procurements and the project and all that, so there wasn't that much space to negotiate the use of reused bricks.”

- Vasakronan

The idea was initially something that the respondent, who is a property developer at Vasakronan, initiated and was further discussed with the turnkey contractor once the project had already started, hence the limit on the extent to which they could incorporate reused bricks. They further explained how they ended up using reused bricks inside of the buildings instead of using it for the exterior, which is according to the respondent because they came up with the idea rather too late in regard to the procurements. Further, it was highlighted that they are constantly working and discussing how they can improve their sustainability work, which is where the reused materials come in. The respondent described how they have been using reused interiors in other projects and wanted to further expand their circularity in construction.

Another respondent was involved in a project where they wanted to demolish a building in order to build a complete new one, where eventually the idea of reusing the bricks for the new construction was born. The respondent, who works as an engineer within energy and sustainability for a public customer, explained the following:

“We had a building that was supposed to be demolished and we thought it had a lot of nice bricks, so we felt that we wanted to preserve them and reuse them if it was possible.”

- Region Kronoberg

This idea came from the respondent and the project leader early in the process and is important according to the respondent in terms of picking the desired material for the exterior part. Similar discussion was present with the second public customer, where the two respondents emphasized how people high up in the organization had a key role in deciding what material was to be used in construction projects. Their decision to use reused bricks came from the project leader, and they even decided to reuse other materials from the same building but for another project after their CEO initiated the idea. They continued by emphasizing how difficult it is to reuse materials once the project had already started, since they then had already signed the procurements. The respondent explained the following:

“(...) we had already signed a procurement contract with a turnkey contractor and started the demolition, and then we thought ‘can we really do more?’.”

- Helsingborgshem

Moreover, both respondents from Helsingborgshem and the respondent from Region Kronoberg emphasized how they, as a public customer, can only describe a function in the procurement rather than explicitly choosing a material from the start.

Another pattern among the respondents' answers was how the architect in certain scenarios was the one who initiated the use of reused bricks. An architect from Fojab explained how the project they were involved in, the designated architect together with the turnkey contractor's sustainability manager had worked on the idea to use reused bricks in a new

construction project. However, the idea was not in the contract from the get-go, rather it was developed during the creative part of the project where the architect works with the turnkey contractors on what materials to use for the property.

It was also evident throughout the interviews that the motivations for choosing reused materials for the construction projects differed between the buyers. For the private customer, the motivation was to enhance the sustainability values and find suppliers that comply with those values, and to be able to use such a unique construction as storytelling for their own organization. For the public customer Region Kronoberg, however, it was evident that it was due to their own free will. The engineer within energy and sustainability at the organization argued that they always do environmental building for new constructions, and that this is a requirement for them that comes from their environmental program, which is a type of political document. For Helsingborgshem, the motivation was to comply with their city's goals in general, and the respondents argued that they have to take the public good into consideration when working with these kinds of projects.

Desired features of construction projects

Regarding the desired features of constructions, the respondents had quite similar expectations throughout the projects. It was evident that longevity of the constructions was crucial with a minimum level of maintenance. Moreover, price and function in combination with aesthetics was important to the respondents. For example, the turnkey contractor and subcontractor emphasized how they are controlled by price, which they always attempt to bring down, and strive to fulfil the minimum level of the project requirements. On the other hand, some of the respondents also spoke of the need to further incorporate reused materials and other sustainability aspects in their construction projects. The architect

explained that, for them, sustainability is indeed really important to work with.

There was a slight difference in the preferences among customers, depending on if the customer was private or public. For instance, public customers do in general own and manage their properties longer than private companies do, and therefore, it is more profitable for such customers to think more long-term and choose materials such as bricks, which initially are more expensive than e.g., wooden facades, but pays off in the long run. This is crucial, since one of the public customers highlighted how price was generally the most important factor within their construction projects. However, longevity was something that the private customer Vasakronan in this case values, argued by the property developer at the company:

“(...) that it is easy to maintain, that you can have the materials for a very long time and such... longevity is also very important. (...). If you build to sell, then you obviously think a lot about the price too, but we can probably motivate a higher price if we know that the properties have a longer lifespan.”
- Vasakronan

Further, the respondents of Vasakronan explained how they believe aesthetics is more important in some parts of constructions rather than other parts. They brought up the example that an entrance is more important to look aesthetically appealing than the actual offices. Additional thoughts regarding aesthetics were how important it is to have visual aspects of the construction that would last for many years, as an aspect of sustainability. Something that was highlighted during this interview was that reused materials such as bricks bring out unique features of constructions and it was discussed how this could potentially be used as branding and storytelling for the private customer. Moreover, they explained how the end-customer in their current construction

project thought the idea of using reused bricks was fantastic.

Regarding suppliers' brand awareness of brands such as Brukspecialisten AB, it became evident throughout the interviews that also in this case the opinions differ between the actors within the value chain. However, for turnkey contractors and subcontractors, having awareness of a supplier brand since before, relieves their workload. A respondent who works as a purchasing leader at a turnkey contractor company explained the following:

“Regarding quality aspects it matters if you know about the brand or not. (...). You should also be able to show that you have good delivery ability, quality, and good pricing.”
- Turnkey contractor (anonymous)

Not having heard of a brand before therefore means that they have to check the company's financial stability and reference projects, i.e., how the company has performed in earlier projects, and thus, not being familiar with a brand means less security of supply and delivery. The architect respondent explained their view on the subject:

“For the contractor, it matters more because they want to work with... I mean for them it is important with supply security because if they work with someone they have never worked with before, they do not know if they are supply secure.”
- Fojab

For the customers it is more important that the values of the supplier are in line with the internal values of the company, such as valuing sustainability.

Prejudice and the future of the construction industry

The opinions regarding reused materials differed throughout the interviews, with some respondents being excited about it,

meanwhile others brought up obstacles with the usage of such products. When speaking of reused materials, the CEO of the subcontractor company was critical to how the production and usage looks like today within the construction industry:

“There are many things that have to be solved in order for this to turn out as good as possible. I believe in the idea itself, certainly, but right now you can really waste money on reused materials.”

- Sehed

Although the respondent liked the idea itself, they did not truly believe in its benefits already, but had the belief that it can get better the more common this kind of reuse of materials within the construction industry gets in the future. The reason for this opinion is much due to the perception of it being expensive, harder to handle than newly produced materials, and not even very environmentally friendly. The respondent also spoke about a prejudice among brick suppliers in general:

“If you ask most other brick suppliers, they don’t believe in reusing at all. They don’t have this in their systems, and then... we are a competitor to them. They want full coverage of their own brickyards.”

- Sehed

However, depending on what kind of reused materials one is referring to, people’s perceptions tend to vary. The anonymous turnkey contractor respondent brought up that they had used reused materials before, e.g., switches to tramways, and that this was in order to make cost savings. Thus, it shows that everyone does not have the perception that it has to be expensive. One of the public customers explained that they had experience of reusing concrete and steel such as sinks and stair railings, i.e., things that have a high environmental impact. Regarding reused bricks, they had also had experience of such usage prior to the current project but admits that they also had been

doubtful. A project manager of the company explained that they had had the prejudice that hollow bricks and cement are difficult to reuse and that it simply would break. A construction project leader at the same company explained their experience regarding how Brukspecialisten AB totally has changed their view on reused materials:

“For me, they broke the prejudices we had about bricks. So, they dared to test it and said, ‘it is possible, let’s do this’, so they are eager and... because it was not only our prejudices, but many others who said, ‘it is not possible to reuse’, and then they came.”

- Helsingborgshem

Thus, with a lack of knowledge, some people tend to question the reuse of materials. Before the public customer knew any better, they thought it was impossible to reuse bricks, but then they found out about Brukspecialisten AB and they changed their mind. The architect and turnkey contractor had similar perceptions of Brukspecialisten AB, and they emphasized how much competence the company actually possesses. One distinctive discussion was with the architect from Fojab who said the following:

“I see them more as a creative counterpart in an early stage of a project rather than that they’re just selling bricks.”

- Fojab

The respondent further explained how he more than often had conversations with a few people from Brukspecialisten AB when they wanted to brainstorm ideas as a creativity boost. The same perception was present with the turnkey contractor respondent, as they described the following about Brukspecialisten AB:

“I’m thinking that they have a lot of knowledge both as a support system for projects but also with their supply of bricks.”

- Turnkey contractor (anonymous)

Further, regarding the future of reused materials in the construction industry, respondents perceive them as a company that is creating a path towards sustainability within the construction industry. This makes them unique, according to one of the public customers. Moreover, regarding the fact that they pick up bricks from demolished buildings in order to use the bricks for new constructions is something that the respondent wanted to see more of. The respondent meant that similar construction companies should be taking more responsibility also in the final stage in the lives of constructions.

Another thing that was discussed throughout one of the interviews was climate reporting. According to the architect, new constructions will need to implement this from January 2022. The respondent explained the benefits as following:

“(...). It will definitely bring a driving force for recycled material, because they are zeroed in a calculation. Because if they have already served a purpose before, they are zero in your calculation and that is great.”

- Fojab

Thus, this will be a driving force for using more reused and recycled materials in the future, since it will therefore be easier to distinguish the companies which are going sustainable from those that are not. It will allow companies that want to incorporate reused materials into their constructions to stand out.

Discussion

In this section, a discussion will be presented with connections between previous literature and findings from the conducted study. By this discussion, we will answer our research question.

Our investigation of the role of the brand in purchasing reused materials in B2B suggests that in a circular B2B setting, branding has specific features that differ from B2B branding. The latter is about creating trust in terms of providing the customer with confidence in regard to purchasing from that specific brand (Leek & Christodoulides, 2011). On the other hand, the role of the brand in this case is to act as a creative counterpart. This is referred to as *the consultative feature*, which includes exchanging ideas and providing knowledge for actors involved. Several actors involved in projects with Brukspecialisten AB mentioned this aspect of their business as unique and desirable. The purpose of such a feature is to close the loop in terms of CE, meaning that the role of the brand is to initiate the use of reused materials. This differs from relationship activities explained by Mokhtariani et al. (2017), where the purpose is to make clients return with new projects. Further, this differs from B2B branding because the end users eventually turn into suppliers (Martin & Shouten, 2012) as materials from demolitions are used for new constructions. Thus, it is important for brands to form and maintain relationships with actors in projects, in order for discussions about using reused materials to take place.

Moreover, as visualized in the chain of actors model, initiation is shown to be important for reused materials to become a prerequisite in the project requirements. It is especially important to state such requirements in the case of public customers, since they act along with public procurement laws (Stern, 2011). Without the initiation, there are no incentives or obligations for the turnkey contractor to initiate such ideas on their own, since they do not prioritize the same values as the customer.

Further, regarding the brand's effect on purchasing, it is evident how *coupling of*

internal values is essential for purchasing of reused materials. Cassia and Magno (2019) has mentioned how brands can have both functional and emotional features, which in turn can give the buyer a unique experience. Throughout this study, different internal values are present depending on which actor is being analyzed, including contrasts such as financial preferences, e.g., minimizing costs, and sustainability, e.g., longevity and classical aesthetics. As customers and architects are present at the top of the chain, their receptiveness to emotional features becomes crucial in this context. Turnkey contractors and subcontractors care more about accomplishing the lowest price possible meanwhile fulfilling the minimum level of the project requirements prescribed by the customer (Leek & Christodoulides, 2011). This shows how the role of the brand differs between actors. Thus, although both functional and emotional features are visible, the findings in this study argue for how a CE context creates greater emphasis on emotional values than in B2B in general.

Moreover, it was evident how private and public customers differ due to the type of ownership and social control, as explained by Raharjo and Eriksson's (2017). Public customers have to oblige with political documents and the public good in these kinds of projects, meanwhile private customers want to enhance sustainability and find suppliers that comply with their values and market demands. This further highlights the argument for how emotional values are of greater importance within CE.

Another essential role of the brand for purchasing reused materials is *brand reputation*, especially when targeting turnkey contractors and subcontractors. Since reused materials are still experienced as a novelty, buyers are experiencing insecurities regarding such purchases (Gomes et al., 2016). However, it is clear how the brand reputation can aid the experience by positioning the brand on the market, as well as considering supply

security and project references as important features. Reused materials and the concept of circularity is changing the entire industry, and the reputation of the brand therefore becomes even more essential in a CE context because of the insecurities that the novelty brings.

The brand reputation has the ability to bring out the unique features of the reused materials through storytelling. It implies a different view of the materials in contrast to Gomes et al. (2016) who argue for products in the construction industry not being unique. Users within the construction industry can further turn this feature into storytelling of their own, making it an additional way of differentiating the supplier brand and the customer brand.

Throughout this study, it was evident how the respondents' mindset on circularity were in connection to the growing importance of sustainable practices in the construction industry. Singh and Giacosa (2019) indicate how circular values within a company can encourage reuse which essentially leads to prolonging the lifespan of materials. Furthermore, the involvement of circularity leads to shifts in the supply chain. Despite the visible interest regarding CE among the respondents, critique from the subcontractor shows how the industry is still suffering from reluctance and is lagging behind in its sustainability work. It is difficult for certain industries to widely accept CE, and the reasoning for this is the behavioral and economic factors of a specific target group that play a big role in how accepted this will be (Singh & Giacosa, 2019). The role of suppliers offering reused materials is therefore to guide customers into becoming suppliers of their own materials, paving the way towards CE. Due to this shift, the role of the brand is a vital part in order for the industry to make changes into more circular practices.

Conclusion

In this section, we will shortly present the conclusions and the contributions that this study has resulted in, as well as managerial implications and suggestions for future research.

Throughout this study, the role of the brand for purchasing reused materials in B2B has been discussed. It was evident how the role of the brand differs between actors due to their various incentives and goals for doing business. Thus, since several different actors are involved in construction projects, branding in this context should differ depending on who is being targeted.

Branding towards customers and architects should be based on features that bring out emotional aspects. As they are at the top of the chain, they have the biggest influence on purchasing decisions, and initiation by these actors early on will result in the establishment of reused materials in project requirements. Therefore, branding can with advantage be focused on these actors. Further, as public customers are constrained by procurements, the purchasing processes differ in comparison to private customers, who can choose more freely on who should be involved in construction projects. This emphasizes the necessity for public customers to state in their project requirements the desire to use reused materials in a specific project. Once it is initiated, the actors who are later on responsible for materials will comply with the criteria in the procurement.

However, in order to make behavioral changes within the construction industry, all actors need to be taken into consideration. This can change attitudes regarding reused materials, as well as affect the purchasing decisions and indirect influences within the entire chain. Turnkey contractors and subcontractors should therefore not be excluded from the branding efforts since they are still a vital part of the chain of

actors. It was evident how these specific actors tend to see the objective features of brands, meaning that branding towards those actors should cater to those aspects, such as supply security.

The discussion leads to the development of the theoretical framework 'circular branding', which differs from B2B branding mainly due to the incentive to close the loop in regard to CE. Circular branding highlights the power of consultative features of a brand, it emphasizes how coupling of internal values and the emotional aspects are becoming more crucial, and how brand reputation is even more necessary than in B2B branding. The development of circular branding is essential for B2B industries to change societal patterns towards more circular solutions.

The theoretical framework of circular branding needs further investigation through future research. This study is limited to exclusively one case company in a specific industry, meaning that further investigation is required in regard to different roles within organizations. Further, this study is limited to the focus of reused bricks, implicating that more studies need to be conducted on other reused materials in the same industry. More research can generate a better understanding of how circularity can be branded and therefore enable greater generalizations of the contributions.

Reference List

Books

Eriksson, P. & Kovalainen, A. (2008). Research philosophy. *In Qualitative methods in business research* (pp. 11-24). SAGE Publications Ltd, <https://www-doi-org.ezproxy.ub.gu.se/10.4135/9780857028044>

Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods (Vols. 1-0)*. Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412963909

Martin, D., & Schouten, J. (2012). *Sustainable Marketing*. ISBN 10:0-13-611707-4, ISBN 13:978-0-13-611707-0. 244 pages.

Weele, A. (2018). *Purchasing & supply chain management: Analysis, strategy, planning and practice* (7 upplagan ed.).

Willig, C. (2014). Interpretation and analysis1. In *The SAGE handbook of qualitative data analysis* (pp. 136-150). SAGE Publications Ltd, <https://www-doi-org.ezproxy.ub.gu.se/10.4135/9781446282243>

Academic articles

Bildsten, L., & Manley, K. (2015). A framework for understanding purchasing in building construction companies. *Construction Management and Economics*, 33(11-12), 865-879.

Cassia, F., & Magno, F. (2019). A framework to manage business-to-business branding strategies. *EuroMed Journal of Business*, 14(2), 110-122.

Gomes, M., Fernandes, T., & Brandão, A. (2016). Determinants of brand relevance in a B2B service purchasing context. *Journal of Business & Industrial Marketing*, 31(2), 193-204.

Gromark, J., & Melin, F. (2011). The underlying dimensions of brand orientation and its impact on financial performance. *Journal of Brand Management*, 18(6), 394-410.

Hopkinson, P., Zils, M., Hawkins, P., & Roper, S. (2018). Managing a Complex Global Circular Economy Business Model:

Opportunities and Challenges. *California Management Review*, 60(3), 71-94.

Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular Economy: The Concept and its Limitations. *Ecological Economics*, 143, 37-46.

Leek, S., & Christodoulides, G. (2011). A literature review and future agenda for B2B branding: Challenges of branding in a B2B context. *Industrial Marketing Management*, 40(6), 830-837.

Lehner, M., & Halliday, S. (2014). Branding sustainability: Opportunity and risk behind a brand-based approach to sustainable markets*. *Ephemera*, 14(1), 13-34.

Louro, M., & Cunha, P. (2001). Brand Management Paradigms. *Journal of Marketing Management*, 17(7-8), 849-875.

Mokhtariani, M., Sebt, M., & Davoudpour, H. (2017). Construction Marketing: Developing a Reference Framework. *Advances In Civil Engineering*, 2017, 1-14.

Mudambi, S. (2002). Branding importance in business-to-business markets: Three buyer clusters. *Industrial Marketing Management*, 31(6), 525-533.

Nasir, M., Genovese, A., Acquaye, A., Koh, S., & Yamoah, F. (2017). Comparing linear and circular supply chains: A case study from the construction industry. *International Journal of Production Economics*, 183(PB), 443-457.

Raharjo, H., & Eriksson, H. (2017). Exploring differences between private and public organizations in business excellence models. *International Journal of Operations & Production Management*, 37(12), 1795-1816.

Singh, P., & Giacosa, E. (2019). Cognitive biases of consumers as barriers in transition

towards circular economy. *Management Decision*, 57(4), 921-936.

Stern, P. (2011). Låg nordisk aktivitet i offentlig upphandling av innovativa tjänster. *Forskningspolitik*, 34(3), 20-21.

Stormbom, C. (2019). Language change in L2 academic writing: The case of epicene pronouns. *Journal of English for Academic Purposes*, 38, 95-105.

Terry, J. (2017). A Singular "They": Breaking Down The AP Stylebook's New Rules on Gender. *Public Relations Tactics*, 24(10), 4.

Varnäs, A., Balfors, B., & Faith-Ell, C. (2009). Environmental consideration in procurement of construction contracts: Current practice, problems and opportunities in green procurement in the Swedish construction industry. *Journal of Cleaner Production*, 17(13), 1214-1222.

Websites

Brukspecialisten AB (2021). *Om oss*. Retrieved 2021-02-02, from <https://www.brukspecialisten.se/om-oss>

Brukspecialisten Tegel. (2021a). *Återbruk av befintliga fasader*. Retrieved 2021-02-02, from <https://tegel.brukspecialisten.se/groent-murverk/aaterbruk-av-befintliga-fasader/>

Brukspecialisten Tegel. (2021b). *Återbrukat fasadtegel*. Retrieved 2021-02-02, from <https://tegel.brukspecialisten.se/produkter/aterbrukatfasadtegel/>

Boverket. (2020, December 28th). *Klimatdeklaration vid uppförande av byggnad*. Retrieved 2021-04-23 from <https://www.boverket.se/sv/byggande/uppdrag/klimatdeklaration/>

Katz, L. (2020, September 16th). Benefits of Using Recycled Materials for your

Construction Project. *Million Acres*. Retrieved 2021-04-27 from <https://www.fool.com/millionacres/real-estate-market/articles/benefits-of-using-recycled-materials-for-your-construction-project/#>

Konkurrensverket. (2016). *Swedish Public Procurement Act*. Retrieved 2021-04-23, from <https://www.konkurrensverket.se/globalassets/english/publications-and-decisions/swedish-public-procurement-act.pdf>

Steen, J. (2021, February 22th). Så kan byggmaterial bli cirkulära. *Arkitektur*. Retrieved 2021-04-27 from <https://arkitektur.se/debatt/debatt-debatt/sa-kan-byggmaterial-bli-cirkulara/>