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Dealing with change

The ethical and organisational challenges of implementing big data practices

in a traditional Danish media company – a CSR study.

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Abstract

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Keywords: Big data, Media, Corporate Brand Identity, CSR, Corporate Social Responsibility, Ethics of Empowerment, Stakeholder Engagement, Ethics of accountability, Employee Empowerment.

Purpose: This study aims at researching how the ethical issues raised by big data practices can be used to motivate internal CSR actions based on stakeholder engagement.

Methodology: The study applies a qualitative approach based on a participant observation while the authors were doing an Internship in the innovation department at Aller Media A/S. A set of semi-structured interviews with employees of the company were conducted.

Theoretical framework: Big data is analysed as an originator of issues around privacy; elements from CSR (stakeholder engagement) are analysed in order to reflect upon the managerial ethical landscape inside the organisation.

Empirical foundation: In order to situate the reader a background of the company situation is provided, together with an overview of the project and the brand which is implementing the big data project. Semi structured interviews with selected managers from the company were conducted in order to get their insights around big data practices and ethical practices, The interviews were analysed in order to compare practices versus corporate structure around ethical guidance to provide the analysis' foundation.

Conclusion: The need to innovate decaying products based on printed media, drove the company to invest in big data practices to implement data-driven decision making processes. Such new technology also requires new organisational culture and high ethical standards by all involved employee, otherwise the company will still be at risk of falling into new privacy scandals as the Se&Hør scandal. Implementing a formal CSR structure based on stakeholder engagement raises as a suitable practice to litigate risks and harness the competitive advantages of big data practices.

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1. Background

Aller Media A/S was chosen as the object of study because it is a bold example of a very traditional company inside an industry that is affected by the recent digital disruption, where media is migrating from printed to digital and from static to mobile devices. The consumption of media products is changing so quickly that innovative products are a must-do for companies in this industry, to re-attract the migrating revenue streams and audience. Thus, besides the general industry situation, Aller Media A/S has established the Innovation Department approximately two years ago. This department is focused on developing new media products and brands in search of renewing the printed portfolio of core business.

Aller Media A/S is a 139 years old media company that started in Denmark but is now present in four Nordic countries: Denmark, Sweden, Finland and Norway. It is a mother brand with several brands under its control, such as Elle magazine, Se&Hør, Billed-Bladet and others. During its history the Danish company turned into a market leader in printed media (Aller Media A/S, 2015). Since the printed media has its foundation in journalism the company always followed the code of conduct concerning the field of journalism and marketing.

Since its first attempts to transition from printed to digital media, by establishing brands websites and offering content on line, Aller Media A/S has to adapt and dive into the information technology based world. This was illustrated by the fact that the fund that has supreme ownership of Aller Media A/S called "Aller FONDEN" had employed the former president of the ethical council to be the head-chair for the foundation (Christina Nordvang Jensen/Berlingske Avis, 2014). With the appointment of Linda Nielsen, a Law-Professor at University of Copenhagen and president for the IT-Criminal prevention council (Kriminal-præventive råd). Aller Media A/S established a code of conduct and a whistle-blow system and all restrictive ethics norms to assure that the corporation would follow high ethical standards to comply with the traditional brand.

In 2014 a scandal known as the "Se&Hør scandal" was discovered. It involved the misuse of personal information with an economical motivation, where people inside the corporation bribed personnel in an external IT company to buy information from celebrities' credit cards to monitor them and obtain breaking news (Greenslade, 2014). Since the leak of this scandal, Linda Nielsen has resigned from all involvement with Aller Media A/S and the company has undergone an audit as well as taken a 20% decrease in sales, adding the overall cost of the scandal to 30 million Danish Crowns (Finn Graversen, 2015). Aller Media A/S has made

it clear that they cannot allow a similar scenario to happen again and as a response they reformulated the code of conduct of the company, strengthened the acknowledgement of the IT code of conduct, created the 10 managerial principals, that is a collection of principles that managers should use as a guidance for best practice and ethical behaviour, and included all these ethical statements in the strategic landscape which is announced every three years.

Yet, with ongoing developing products the innovation department is also seeking to change how decisions are being made about products and new brands and on the leanest innovation process to create these new products. So big data, as the company believes, more than just a buzz word, can be the tool to harness the potential of the created products as well as to offer better insights about the products. Therefore, the company feels the need to change to digital media in an already disrupted market. Even as a traditional company that built a structure to avoid ethical misguidance, the structure failed in preventing ethical issues within the information technology field.

2. Introduction

This thesis aims at showing how big data and its ethical implications impacts the structure of a traditional media company that is searching for a shift from printed to digital media. The discussion of this subject is relevant because the word big data is flooding marketing practices and other organisational practices. However, the extreme optimism upon the effectiveness of the tool lacks reflection about how these tools interact with individuals (in this case specifically users and consumers of internet) and how internal actions of promoting Corporate Social Responsibility (CSR) are necessary to harness the potential of the tool in order to protect society from data misuse or other security problems as well as from all the negative impacts that a data-driven company can lead to, hurting corporate image and enraging consumers instead of engaging them.

The main theoretical contribution of this research is to enrich the ethical discussion about big data. Specifically, the work intends to contribute to the studies of CSR focused on internal stakeholder engagement in order to improve ethical performance within the corporation when handling big data activities.

Protecting individual's privacy when dealing with big data practices is an exercise that begins within the own organisation, in this case Aller Media A/S, whose already suffered negative impacts about privacy invasion issues due to the Se&Hør scandal.

What makes this work singular is the discussion of business ethics in big data with focus on CSR activities related to internal stakeholder engagement when regarding the information technology (IT) field (Hill & Rapp, 2014; Ripley & Ripley, 1992; Jin & Drozdenko,2003, 2010; Jin, et al., 2013; Kjonstad & Willmot, 1995), seeking to promote an approach that involves more workers inside the companies in order to enrich ethical guidance within the company when dealing with such large amounts of data.

Since technological disruption is a reality in the business world and this is a matter of how to create new business revenue streams, new economical values and the transformation of how society interacts with companies, there is no way that traditional restrictive ethical guidance, silo departments, bureaucratic management and task oriented employees would be enough to secure privacy and other individual and human rights in the authors' point of view. Thus, a more open approach must be given in order to secure the societal benefits of such activities performed by the company, e.g. tailor-made made content and good advertisement practices.

The research was performed in Aller Media A/S located in Copenhagen, Denmark, which started a project of implementation of a big data analysis tool using the brand Royalista, a royal family's news portal, as the pilot for big data activities. The data was gathered through a qualitative data analysis based on participant observation where interviews and other material were collected to provide the empirical material for the discussion.

2.1 Problematization

Given the presented background and introduction of the research, how can the company dive into the creation of new digital products and brands without hurting individuals' privacy? What are the gaps within the organisation that can lead to new ethical problems? What are the actions that can be taken in order to fulfil public expectations and provide good managerial actions?

All these questions can be summarized into the research question presented below, that will guide this research:

RQ: How can ethical issues derived from big data practices justify the initiation of structured internal CSR actions based on internal stakeholder engagement in a traditional media company?

3. Theory

The theory section will be divided in two main sections, in the first one we will explain what is big data, why such word is the new hype in corporate world and how does it threat business operations. In the second CSR theory will be presented and discussed under the big data perspective, stakeholder engagement theory will be discussed to present its features and why it matches with the thesis work.

3.1 Big data

3.1.1 What is big data?

But what exactly is big data? Epistemic definitions can afford material for an entire work by itself. Davis & Patterson (2012), Balar et al. (2013) and Nunan & Di Domenico (2013) define big data through the 3V's: Volume, colossal amount and exponentially growing (what now is defined as big volume will not be it in five years); Variety, many types of data that go beyond traditional databases and extend to all unstructured data (e.g. Tweets, Facebook posts, Instagram pictures, etc.) and; Velocity, the speed in that data is generated, exchanged and analysed, where through cloud data storage the access and capacity of analysis that before was made by supercomputers can now be made by a desktop computer.

> "Several technological and socioeconomic trends, including the migration of social and economic activities to the internet, and the falling costs of data collection, transport, storage and analytics, are leading to the generation of huge volumes of data – often referred as big data. Big data now represents a core economic asset that can create significant competitive advantage for firms and drive innovation and growth" (OECD Publishing, 2013, p. 319).

Another important technical characteristic of big data analysis is the metadata, which is defined "as a set of data that describes and gives information about other data" (Richards & King, 2014). For example, a tweet is not only a set of 140 characters; it also contains data about the location, date, time and author of the tweet. So we can call this set of data the metadata contained in each tweet. This works for every social network as well as for any other data generated by any other device. Hence, metadata is the technical completion that gives so much power to big data, aggregating and analysing all kind of unstructured data, matching up with the metadata, giving incredible power to the analytics tools.

This technical definition of the term hides the real meaning of big data in our society. Boyd & Crawford (2012) say that "big data is less about data that is big than it is about a capacity to search, aggregate, and cross-

reference large data sets" and argue that big data is a "cultural, technological and scholarly phenomenon" (Boyd & Crawford, 2012, p. 663), result of the interaction between technology, analysis and mythology.

The technology maximizes computer power and algorithmic accuracy to "gather, analyse, link and compare large data sets" (Boyd & Crawford, 2012, p. 663). Analysis is the ability to draw "on large data sets to identify patterns in order to make economic, social, technical and legal claims" and the mythology which means the belief that through analysing high amounts of data, one can generate better insights, "that were previously impossible, with the aura of truth, objectivity, and accuracy" (Boyd & Crawford, 2012, p. 663).

Nunan & Di Domenico (2013) understand big data under three perspectives. 1) Technological: a response to technical challenges resulting in technological innovations that enabled storing, securing and analysing the ever growing big sets of data. 2) Commercial: The effectiveness that organisations can reach with consumer insights generated from data. And 3) social: The impact on our society by analysing these data sets, influencing individual privacy and ethical commercial use of data.

This belief that data will enlighten human activity trespassing human rationality to another level is a dangerous assumption (Crawford, et al., 2014). The determinism contained in this assumption has "convinced us, for better, or for worse, that our digital lives automatically produce data which is incapable of lying, is the blinding effect of black-boxing technology" (Reigeluth, 2014, p. 244). Neglecting the social process there is within big data activities and how these activities are structured offer a real threat for society and impoverish the further development of the so called "digital society".

3.1.2   Data, the new oil?

Big data rises as a facilitator on tracking consumer behaviour, unravelling unimagined possibilities for analysis. In an interview about a big data analytics tool from IBM, called ExperienceOne, Kevin Bishop (Vice president of IBM ExperienceOne) says that the tools built to track behavioural paths on the internet are so powerful that they can go beyond the conventional generalization of gut feeling decision and interpretation of traditional market research techniques (Davis, 2014).

These methods and tools applied in traditional market research rely on studies and on the use of data gathered until a given moment and for a certain purpose, giving a "snap shot" view of the consumer behaviour. Now, with the exponential capacity to aggregate, store and analyse data sets, brought by technological development, the capacity of analysis is so large that it can be performed in real time, creating every second a new snap shot.

If in the traditional market research methods we had the snap shot of the consumer behaviour, then now, big data provides the moving picture analysis, that changes the essence of the knowledge provided (Richards & King, 2014) as well as the way social research is done (Boyd & Crawford, 2012).

For example, the TV series "House of Cards" broadcasted by the streaming company Netflix was one of the greatest successes in its first season. The most interesting fact is that Netflix managers knew that it was going to be a success, because of the complex data analysis they had performed before making the decision (Simon, 2014). Based on consumer behaviour and a set of predict and profile processes, they relied on big data analytics practices and decided to invest US$100 million without even seeing the pilot (Sweney, 2014). Netflix has access to a database of more than 33 million subscribers and can analyse all content watched, the number of views, and even the number of pauses, forwards and rewinds made by each user (Carr, 2013). This can bring another level of insights to managers when it touches on consumer behaviour and decision making. Of course, there is also a lot of discussion of how this data-driven streaming content could be imprecise (Carr, 2013), but for this case, the "cards" played in Netflix favour.

Nonetheless, besides this optimistic hype upon the future of big data, the only thing we are sure of now is that all the efforts are on "making big data bigger", there is no reason for companies not to implement data-driven analytics based on the huge amount of data available (Vaidhyanathan & Bulock, 2014).

Some "tech enthusiasts" in media like Toonders (2014) consider big data the "new oil", because of the size of revenue and revolution it is already causing in business activities. But, as Thorp (2012) already pointed out, data is not the new oil because it carries a lot of risks regarding personal information and in the way that revenues are being generated, extracting personal data only for the benefit of the organisation. He follows stating that maybe there exist a parallel between oil and data but in a negative way:

> "Perhaps the "data as oil" idea can foster some much-needed criticality. Our experience with oil has been fraught; fortunes made have been balanced with dwindling resources, bloody mercenary conflicts, and a terrifying climate crisis. If we are indeed making the first steps into economic terrain that will be as transformative (and possibly as risky) as that of the petroleum industry, foresight will be key. We have already seen "data spills" happen (when large amounts of personal data are inadvertently leaked). Will it be much longer until we see dangerous data drilling practices? Or until we start to see long term effects from "data pollution"?" (Thorp, 2012, p. 1)

3.1.3 Big data, big responsibilities

With big data come big responsibilities and unprecedented effects that all of us do not know the impacts of yet. As we have seen before, big data is considered a game changer, a disruption on the way data-driven decisions are made, changing from the snap shot of the moment to the moving picture. But as all other disruptions, there is no deeper understanding of the effects of the rise of this information era. "There's no broad, ecological account of their effects. There is no policy agenda beyond particular reactions to particular technological changes" (Vaidhyanathan & Bulock, 2014, p. 56).

The commercial promise of better and more personalised products and services that big data should promote relies on trust. Without trust, organisations will face problems with regulators and customers (Nunan & Di Domenico, 2013).

Without an ethical approach a growing lack of trust, law suits and other organisation-individual conflicts will certainly rise, eroding big data enthusiast ambitions and its ongoing (and future) projects. Not having legal and technical boundaries, organisations and individuals that practice big data will be left guessing. Organisations (for and non-profit ones) will get away with what they can do by default until they see themselves reeling from scandal after shock disclosure, while individuals will dive into denial, resulting in an unhealthy and uncertain state of affairs that "leaves individual rights eroded and our democracy diminished" (Richards & King, 2013, p. 3).

Based on what has been said above, there is a need to reflect upon the ethical impacts of this powerful tool and what the threats for individuals are. "In general we note that the most influential ethics codes are hard-won responses to major disruptions, especially medical and behavioural research scandals" (Metcalf, 2014).

The discussion upon the ethics of managing such tools are required, since every single individual in society will be affected by the big data era that we are walking towards, where such technology enforces questions of responsibility, trust and institutional legitimacy, calling for new social and political arrangements (Metcalf, 2014).

Big data is being largely implemented by companies; therefore a discussion about the methods applied to it is required. Society is facing another information revolution and we find ourselves in a critical window while big data is not massively adopted (Richards & King, 2014). The sooner we establish a conversation upon the issues and consequences of big data, the sooner society will harness the power of big data, empowering not only organisations but individuals as well.

Jerome (2014) affirms that the civil rights issues of this generation could be big data practices where "the fear is that data determinism—or the dictatorship of data—could work to undermine equal opportunity and equal justice through either hidden or new forms of discrimination" (Jerome, 2014, p. 221).

We can conclude from this section, that even though governments and agencies are working on new codification and regulation for big data practices, there is still a gap between big data practices and regulations and, that companies can harm individuals and, therefore, harm themselves and its image if acting out of the boundaries that individuals perceive as morally accepted.

In the next section we will specify how big data practices can harm individuals and put big data practices in a dangerous grey zone between which practices are accepted and which are not. Further we will use corporate social responsibility theory to delineate the framework we will use for this Master's thesis.

3.1.4 Privacy, the discussion trigger

The discussion about the main ethical issues raised by big data practices can be seen under the umbrella of privacy as Richards & King (2014) mentioned in their work, which is the key point to understanding the collateral points of **security, identity, transparency, ownership and reputation.** These are the features that need to be explored when discussing privacy in the big data era (Richards & King, 2014). The literature analysed for this study shows fragmented opinions about the issues. Nevertheless, a selection of the ideas in the literature was made in order to establish the roots of ethical inquiry of big data analytics, where privacy is the point of connection of all the issues, since data collection does not come without privacy implications (Nunan & Di Domenico, 2013).

Nunan & Di Domenico (2013) give four examples of privacy issues related to big data analysis. The first one is the re-identification of individuals through crossing anonymous data with other data footprints left by individuals on the web, invading personal privacy and the intention to be anonymous. The second issue is the security of data and how data can be hacked or unauthorized accessed by organisations or individuals. The third problem is the autonomous collection of data independent of human activity; this means that the automation of several activities and analysis lacks the human consent and ethical reasoning. The fourth and last issue regards the ability of organisations for gathering data that is far beyond the capacity of analysing, so organisations are collecting data that is not being used now, but anyway being stored for future analysis capabilities which can lead to privacy breaches in the future, increasing the amount of data stored by the organisation.

Jerome (2014) shows other practical examples of privacy invasion through big data: price discrimination, filter bubbles and surveillance. Price discrimination is the situation when customers are charged differently for the same good or service, based on their profile scored by the analytics tool. This is not such a new practice and does not necessarily mean a bad thing, but once the granularity of this grows exponentially, this price discrimination can be used to exploit or manipulate a certain class of consumers (Jerome, 2014).

Filter bubbles and surveillance are a problem because all these tools perform a high volume of data collection and it happens passively, without the engagement and active participation of individuals. The result of this is that organisations know more about the individual than the individual knows about himself or herself. Tools that profile and categorize consumers can create an "eco-chamber that generates feedback loops that reaffirm and narrow an individual's thoughts and beliefs" (Jerome, 2014). So this automatic profiling defines people according to their web behaviour which is just part of one's social behaviour. At the same time as it narrows down people who will see more and more opinions in line with their own thoughts and beliefs.

3.1.5 Security

The construction of the idea of a virtual world of data is enforced by the term "cloud" which refers to the access of data anywhere and anytime given the technological developments of the internet and the wireless connection, so access to databases is possible from any device with an internet connection (Portmess & Tower, 2015).

This concept of cloud hides the materiality of data and guides us to a misleading concept, where all information is stored in thousands of data centres spread around the globe and are transmitted by fibre-optic cables, satellites, routers and power grids. The construction of this massive data centres are results of "concrete technical decisions, public policies and commercial norms" (Reigeluth, 2014, p. 246). All this materiality of the cloud computing show how fragile the security of information generated by all is; where breaches, human failure and any other kind of failure can put the security of data at risk (Portmess & Tower, 2015).

Security issues are normally related to hacking of systems and databases, but there are also security breaches that can give access of information to an organisation's internal person who was not supposed to have it and, in general, all forms of information leakage.

Let us not forget that "WikiLeaks scandal was caused by a low-level employee's copying data on to a fake 'Lady Gaga' CD" (Nunan & Di Domenico, 2013, p. 5). As big data tools become widely implemented by organisations and data is becoming more valuable, security of the vast datasets should be a concern and a

matter of ethical discussion. Who, when and how to access those datasets needs to be well planned and discussed, otherwise, the security of data will always be threatened.

3.1.6 Identity

"Identity hails from the fundamental right to define who we are" (Richards & King, 2014, p. 42), with the capacity of gathering, structuring and analysing data, companies can profile individuals in order to offer tailored services and products "and enhance consumer welfare and increase firms' profits" (Kshteri, 2014, p. 1137). Still, the disturbing side of this accuracy on tailoring products and services to consumers is that big data analysis can predict and profile who we are even before we make up our mind about it ourselves (Richards & King, 2014).

> "How will our right to identity, our right to say "I am", fare in the big data era? With even the most basic access to a combination of big data pools like phone records, surfing history, buying history, social networking posts, and others, "I am" an "I like" risk becoming "you are" and "you will like" (Richards & King, 2013, p. 3).

By accessing the content generated by individuals, companies can not only profile and target efforts more effectively but create a chamber of echo that can narrow personalities and create social definitions to individuals without giving them the right to be what they choose to be.

Reigeluth (2014) compares the sociological and technical definition of digital identity where "social science approach, frames digital identity as an assemblage of traces, which are automatically and ubiquitously produced" (p.254). And his technical approach defines digital identity as:

> "a perspective developed in computer science and knowledge engineering, sees digital traces as ergonomic forms of reflexivity, assistance and recommendation which are intended to adjust the user to his or her digital environment" (Reigeluth, 2014, p. 253).

Then Reigeluth (2014) argues that traces do not exist by themselves and are a result of the mediation "by the intent and reference of its interpretation" (p.253). All this means that individual singularity cannot be reduced to particular syntaxical arrangement of algorithms and that the intervinience of algorithms in individuals action without any consideration of the subjectivity of human interaction and the non-intended traces left can really affect what it means to be a subject.

Figure 1 Source: www.dilbert.com

3.1.7 Ownership and Reputation

Big data naturally requires organisations to collect and store large amounts of personal data. On the one hand, unlimited options of analysis and researches can be done by storing this high amount of data. On the other hand, there is a lack of control of how this personal stored data will be handled in the long-term (Nunan & Di Domenico, 2013). How long should data be stored? In which conditions and in what context can old personal data be analysed? Can one imagine what it is to have data from ten years ago analysed? These questions lead us to the next item of our ethical discussion.

If, before the internet revolution, our mistakes could be remembered by just a few people and few records left in some archives, then nowadays, all our steps on the web leave footprints, posts on social media, pictures from friends, personal financial debts and all other kind of information can be recorded and stored for a long period, or worse, can be exposed for the whole world and, thus, exposed to public scrutiny.

This raises a concern upon the right to be forgotten, because "big data enables the ability to rewind and fast-forward people's lives, but, doing so may remove the ability for individuals to forget and be forgotten" (Nunan & Di Domenico, 2013, p. 6). This is an important issue related to privacy, what is the limit and what is the individual right to be judged (or analysed) by algorithms? This can stigmatise individuals and create discrimination based on disclosure of private information.

3.1.8 Transparency

Transparency is a paradox in itself when referring to big data (Richards & King, 2013). To fully ensure that big data analysis work, companies and government keep the big data analysis process in secret. This is mainly because there is a "highly sensitive intellectual property and national security assets" (Richards & King, 2013, p. 43) that cannot be opened to full disclosure, as the profit and success of some works rely on this secret. Therefore, if companies are reserving the right of privacy and secrecy of the way they data mine private information, then why does individual information do not have the same right to stay secret?

Hence, transparency rises as a discussion point of finding the balance between law, technical and ethical procedures to ensure that strong safeguards can protect companies, governments and individuals at the same level (Richards & King, 2013), helping against opaque systems that are making decisions about individuals that they are not aware of.

Now that we specified what are the new issues and challenges that big data practices rise for organisations who are handling this type of activities, it is time to discuss what managerial theories are going to be used in this work in order to attempt to answer the research question.
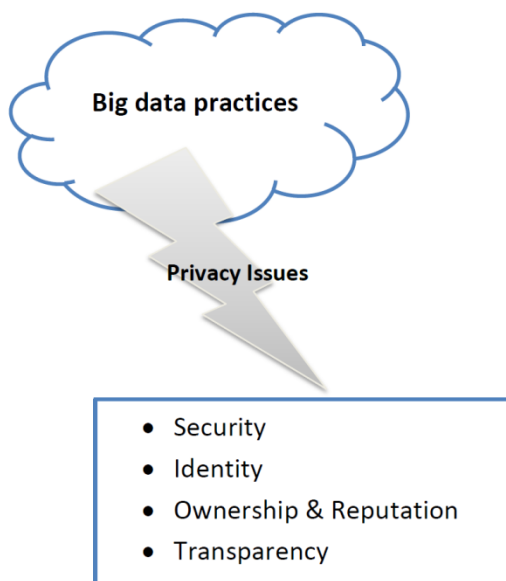
Figure 2 Source: Own elaboration

3.1.9   Consumers and the power of decision

Having defined the problems that big data practices can raise for a company, now it is time to understand what can be affected by the misguided activities of big data. Customers and non-customers will be affected since the internet provides content that is consumed by anyone.

There is a clear idea that consumer patterns nowadays are far beyond the role of fulfilling human basic needs. Several authors like Holt (2002), Corrigan (1997) and Shaw, et al. (2006) describe that more than fulfilling basic needs, consumption is a way to construct the self and build a sense of belonging in our society. Having this in mind we can also say that there is a growing movement around consumers turning up against brands (Holt, 2002; Shaw, et al., 2006), because of perceived unethical activities by consumers.

"The ability to punish those suppliers deemed unethical through boycotting and protest and to reward those displaying genuine ethical credentials through buycotting has resulted in various manifestations of consumer empowerment directly targeted at changing traditional marketing and business behaviour." (Shaw, et al., 2006, p. 1050)

Shaw, et al. (2006) use the concept of consumption as voting where "every penny gives the right to vote" (p.1051), which means that each choice made by a consumer means a vote for a product/service rather than another. This concept gives the idea that consumers are encouraged to make decisions, even when they make them uncounsciously and these choices tend to reform product/service aspects, since it needs to adapt for new consumer preferences and society's expectations. Shaw, et al. (2006) suggest that consumers have less and less tolerance for companies that act unethically or, in a broader sense, behave in a reasonably and ethical way as corporate ctiziens. McShane & Sabadoz (2015) extend the discussion by saying that the consumer not only has the power of choice but rather is free from the "restrictions imposed upon the market by corporations". Thus, it transcends the power of choice paradigm between products from competing corporations. McShane & Sabadoz give the example of a car where car-makers made available more eco-friendly hybrid cars for those concerned with environmental issues. However, consumers transcend the choices of car and exercise the freedom to choose another suitable transportation option (e.g. using a bicycle or public transportation).

The citizen as a consumer claims today the freedom to enact, and even privilege from it. This citizenship role in the marketplace creates a platform for treating consumers as citizens seeking to incorporate both economic and non-economic issues into their consumption decisions. In contrast to the choice-as-power perspective, this citizenship conceptualization views certain choices (i.e. those that are a reflection of the consumer's freedom to integrate citizenship roles into their consumption experience) as simply a manifestation of choice.

This concept of citizen consumer (Shaw, et al., 2006) and the growing movement of individuals against brands (Holt, 2002) lead to put in perspective the importance of the social responsibility of a corporation, where the actions of the corporations can be accountable and not harmful to society. This is what will be discussed in the following section.

3.2 CSR

Corporate Responsibility (CR) or Corporate Social Responsibility (CSR) can have a very broad meaning. The term is a trend in business management discussions and since the middle of the 20th century many business authors and practitioners debate upon the subject. Nowadays this discussion attracts even more attention

because of the need for accountability and the need for corporations to promote the good to community, not only the profit.

To underpin the discussion of CSR in big data it is necessary to explore the concept of CSR, present its main approaches and develop the subject from the point of view of the work and how it can be connected to the privacy issues regarding the practice of big data activities. Thus, in the first part a basic notion of CSR will be given, then the chosen approaches and discussions will be presented and the conclusion of the section will be to pin point why CSR practices are relevant to this work, how they match with theory and how they will contribute to the framework of the thesis.

3.2.1   What is CSR?

The World Business Council for Sustainable Development (WBCSD) in their report about CSR define it as the continued commitment to act ethically and contribute not only to economic development, but also improve quality of life of the workforce, their family members, the community and society, not only the shareholders (WBCSD, 1998). The report also points out that the increasing lack of trust in governments and corporations among society reflects the shift of expectations of what the goals of organisations in the 21st century are, from economical and shareholder goal focus to societal benefit focus, which will also result later in economic and shareholder results.

This basic principle of CSR is also present in Dillard & Murray's (2013) work where they mention CSR as acting in the public interest. This basic principle directs us to the heart of CSR activities discussion: what should be taken for granted when building CSR actions? One answer can be, acting towards the public interests and benefit of a general goal "our challenge, and that of any member of society, is to act, based on a value set that increases the societal welfare rather than the interests of only a subset thereof" (Dillard & Murray, 2013, p. 14).

The CSR goals can vary from a more sustainable way for material production, poverty reduction, reducing corporate malfeasance, incrementing business accountability, to enhancing the level of trust of people in corporations (Dillard & Murray, 2013).

Kotler & Nancy (2005) conceptualise CSR by saying that historically there has been a major change from corporate philantropy to CSR. Where in the first one a corporation did monetary support to a specific social cause but keeping the activities related to the cause apart from the core business, the second one requires corporate involvement assuming the consequences of their business actions. That means: incorporating CSR to its daily activities leading to "a commitment to improve community well-being through discretionary

business practices and contributions of corporate resources" (Kotler & Nancy, 2005, p. 3). This change was defined by them as from obligation to strategic.

Among various authors and definitions of CSR, one of the main works that created a framework for CSR and a deep analysis of the literature and practice of CSR was Carroll (1979). His definition about the subject is: "The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organisations at a given point in time" (Carroll, 1979, p. 500).

What Carroll (1979) explains is that an organisation does not reside in a different sphere from society, but rather that it is part of it and businesses have legal, ethical and discretionary responsibilities towards society as a whole. Okpara & Idowu (2013) based their study on Archie B. Carroll's framework that divides CSR in four dimensions: economic responsibility of business, legal responsibility, ethical responsibility and philantropic responsibility.

The economic responsibility of business regards the profit making principle where some authors mentioned by Okpara & Idowu (2013) like Milton Friedmann advocate that the only social responsibility of a business is to use resources to engange actvities in order to increase profit without deception or fraud; while Peter Drucker also cited by Okpara & Idowu (2013) defends that profit perform three main functions which is to measure corporate performance, the premium for taking the risk of operating business and to ensure the future income supply of capital for the organisation. Besides the different approaches, economic responsibility of business is related to the fairness of how business obtain the profit and how it contributes to society in the long-term.

Legal responsibility relates to the positive and negative obligations of a business that law and regulations impose to business. Some authors like De Schutter (2008) advocate that regulation should increase in order to assure that corporations fulfill the CSR requirements, while other authors like Phillips, et al. (2003) oppose this point by stating that CSR actions should be voluntary and cultivated by the firm management and its stakeholders.

While the first two ones are more related to the eye of regulation and law, ethical responsibility is the dimension that represents the expectations and obligations expected by society and way beyond the regulation and law. Even though the ethical responsibility of business pushes the law category to be more broad and cover more obligations, it also raises the expectations of actions above those required by law (Okpara & Idowu, 2013).

The last dimension is the philantropic responsibility that regards the voluntary actions of business to promote human welfare (arts, education, social and environmental causes), again, even though not being an obligation, stakeholders and society have expectations that corporations would contribute to enhance community (Okpara & Idowu, 2013).

To accomplish the goal of building relationships and actions towards the benefit of society and exercise the four dimensions of CSR, an *Ethics of accountability* must be developed (Dillard & Murray, 2013). According to Oxford dictionary accountability is defined as "required or expected to justify actions or decisions; responsible." Thus by the *ethic of accountability* the authors means developing tools and actions for companies and society to build trustworthy relationships and ways to hold and analyse the impacts of the actions among community members and other organisations (Dillard & Murray, 2013).

Kotler & Nancy (2005) also talk about the legal and ethical paradigm by saying that when talking about CSR they are not only talking about the business activities being mandated by law or is by its nature ethical and moral activities, but rather the voluntary commitment on implementing business practices that contribute to human and enviromental well-being.

This concept of accountability is very important for the thesis framework, since the meanings to develop the *ethic of accountability* does not reside only under the eye of law, yet, accountability needs to be a construction of relationships and actions that can be scrutinized by other private organisations and also the community and government, not only from the point of view of law, but by the expectation of ethical behaviour and benefit of society. Corporations and governments are social organisations and the function of them is to promote social integration: "to specify, coordinate and integrate the efforts of its members in goal directed behaviour" (Dillard & Murray, 2013, p. 14).

After understanding the concept that *ethics of accountability* is the duty to justify one's actions in a transparent way, we can focus the discussion on the main concept of corporate social responsibility that is drawing the rights and responsibilities of corporate management (Dillard & Murray, 2013).

Rights represent the privileges that a societal member is granted, while responsibilities are the obligations carried within the granted privileges. This leads us to the discussion of how CSR should see big data, where the fast pace of technological development set up a very difficult path for policy makers since legislation around its activities are always outdated. To keep up with this work it was decided that the thesis will adopt the ethical perspective rather than the legal perspective, since Okpara & Idowu (2013), Dillard & Murray (2013) and Kotler & Nancy (2005) all present the idea that CSR must always regard not only the law, but rather, what society expects as a moral and ethical conduct.

This type of conduct fits perfectly in big data's fast pace development situation, where corporations that adopt these technologies have to keep in mind the expectations and integrity of individuals and society when implementing the tools. Because, as already presented in the beginning of the theory section, privacy issues and other issues will affect our lives as a whole if not carried out with the right approach.

3.2.2 Why CSR?

Why practicing CSR and why does CSR fit in this research? First we can argue that through exercising the ethics of accountability and by defining that the function of any social organisation is to organize, specify and focus its efforts towards a directed goal. A CSR discussion is relevant in order to understand the actual world. By observing the world with critical eyes we can choose to live and act differently in our chosen professions and social lives as well. The outcome of this is that we can have a transforming, enabling and enlightening effect on the world (Dillard & Murray, 2013).

Alcañiz, et al., (2010) discuss the point of view from an overall CSR perspective, where to survive in a competitive landscape, organisations need CSR practices and should base these on developing trust and expertise. Their research shows that 77% of the interviewed managers would adopt CSR as part of their core strategy and operations.

Nahapiet & Ghoshal (1998) adopt the social capital theory, which involves the company's network and relationships, again stressing the need of managerial involvement, but emphasizing the fact that CSR practices should be a unified, "collective owned capital" (Nahapiet & Ghoshal, 1998, p. 246) that would if the theory of Alcañiz, et al., (2010) concerning trust and expertise is followed, is create credit (social capital credit).

The social capital is referred back to what Nahapiet & Ghoshal (1998) call "intellectual capital", that in return, provides the company with a knowledge based within the organisation, that enables them to innovate the business. Before this can be the "norm" the theories of Hatch & Schultz (2008) come into mind as their theory focuses on the "art of listening to the employees".

The relationship between commitment to social responsibility and organisational outcome was another area of examination. Past researches have reported varying results regarding the association between CSR and performance outcome (Agle et al., 1999; Bhallacharya et al., 2004; Cochran and Wood, 1984; Heinze et al., 1999; McGuire et al., 1988; Singhapakdi et al., 1995; Smith et al., 2004). Their researches were focus on how does a perceived commitment to social responsibility and community service have a positive or negative effect on market share, profits, user satisfaction of new systems (Martin et al., 2005; Weill, 1990), system implementation success (Lucas, 1999), and organisational commitment (Finegan, 2000) More recently,

Beurden and Gossling (2008) summarized their literature review of CSR and financial performance by stating, ''Good Ethics is Good Business.'' They based that statement on the empirical finding of a positive correlation between CSR and financial performance claiming that evidences of the contrary are based on outdated research.

Cramer (2005) states that there are three key pre-conditions to implement CSR in a organisation: commitment from senior management, manpower and money and sufficient internal support. Being the third what we will look for in the empirical analysis.

Hence, CSR fits in this research in the way that, as big data brings new elements in house for management, CSR activities rise as a way to estimulate the development of social capital among consumers and help develop the correct capabilities of each employee of the organisation, building commitment and accountability to each individual involved in the innovation process.

3.2.3   Stakeholder Theory

There are several theories used to analyse CSR activities, Thomson (2007) mapped 33 groups of theories used as theoretical frameworks for CSR studies. All these theories used to frame CSR activities were originated from "economic theories" and "social and political theories". Fernando & Lawrence (2014) use the argument that economic thories regard mainly the financial stakeholders rather than the wider spectrum of stakeholders that a company has, while the social and political theories give a wider perspective to understand CSR activities.

Fernando & Lawrence (2014) justify the use of theories originated from social and political studies to underpin their framework for CSR studies by sauing that there is a considerable relationship between these theories and CSR practices. The stakeholder theory is one of the theories used in their framework and as mentioned by Freeman (2004), the stakeholder theory was created in order to understand the strategic management, but, this theory was adopted in several other managerial researches where in some cases the real meaning of the theory was distorted.

Before going in depth with the discussion we first need to define what a stakeholder is. A Stakeholder is "any group or individual who can affect or is affected by the achievement of the firm's objectives" (Freeman, 1984, p. 49). According to this theory, a company has to meet not only the shareholders expectations but meet multiple expectations of all individuals affected directly or indirectly by the business of a company (Fernando & Lawrence, 2014).

This theory was largely adopted to analyse CSR practices and its performance in companies. As Freeman (2004) states, there is still plenty of room for developing this theory among CSR studies and how to access its performance. Where the fundamental dilemma also mentioned by O'Riordan & Fairbass (2014) is, how to prioritize stakeholder among the diverse claims of the many different stakeholders a company has.

Freeman (2004) mentions that there are two ways to access legitimate stakeholders, one is using power, legitimacy and urgency to prioritize stakeholders.The other way is to identify which stakeholders managers consider legitimate.

Given the two ways to identify legitimate stakeholders, one important feature of CSR practices related to the stakeholder theory is the "stakeholder engagement practices" that can be defined as "those practices which an organisation undertakes to involve stakeholders in a positive manner in organisational activities" (O'Riordan & Fairbass, 2014, p. 123).

This feature is important to this work because big data activties widen the scope of stakeholders since the internet usage in Scandinavian countries is above 90% of the population (World Bank, 2014). So, regarding a media company that provides internet content in Scandinavia, this means that several stakeholders should be regarded not only those that were already there with the printed media actvities, but introduce a whole new range of stakeholders that need to be managed with attention.

Stakeholder engagement can sound a little bit redudant, because every business activity is logically made of interaction and engagement among individuals and companies, but what is at the core of stakeholder engagement is in addition to what actions a firm must and must not perform to meet the moral standards. More attention needs to be paid in the kind of relationships that a firm foster among its stakeholders (Noland & Phillips, 2010).

Because firms are constituted by individuals that pursue different ends and the other stakeholders also have different goals, there must exist a channel for honest unfiltered information flow to interact among internal and external stakeholders in order to implement a key strategy that works. Still this engagement is also a key aspect for ethical decision making and ethical firm behavior (Noland & Phillips, 2010).

By stating this, we can conclude that organisations are constituted by different actors who have different goals and purposes, where without a clear and honest flow of information about each role and responsibility, there is no way companies can engage and foster ethical behavior among the organisation, turning unfeasible any kind of CSR practice.

Therefore, we ask ourselves, how to begin stimulating these open channels of comunication. How do we stimulate ethical behavior and engage different stakeholders among the whole organisation in order to create a virtuous cycle of good management driving good practices that should be scrutinised by the external stakeholders? Encouraging ethical actions inside the company can be the way to kick-off CSR stakeholder engagement practices that can be lead to outside the company as well.

3.2.4   Engaging internal stakeholders

Engaging internal stakeholders means the culture of promoting the empowerment of individuals to make their decisions under ethical reflections, not only by following codes of conduct and being restricted by the rules.

Restrictive or normative ethics are related to mechanistic or bureaucratic organisations where organisations are perceived as having hidden arrangements for political control and decision making that promote values that are oriented towards pressure power and procedures for centralisation (Jin & Drozdenko, 2010)

Normative ethics can be practiced in the form of codes of conduct and ethical guidelines. This is what Kjonstad & Willmot (1995) call the "restrictive ethics", which can be described as the ethical practices that are preoccupied with the creation of standardized norms and values ready to apply into the business routine.

By stating this, there is a believe that the normative ethics which follow the regulatory landscape complying only with the current law with internal and professional codes of conduct are not enough to ensure that ethical behaviour will be the guide in business actions (Sadowski, 2014).

These guidelines or codes of conduct claim standardized norms and values to comply with the requirements of law since "they draw the limits of discretionary decision; they outline general good intentions" (Kjonstad & Willmot, 1995). But the codes of conduct and standardized normal procedures have its limitations that reside on the lack of reflexive exercise and hardly turning into corporate practice (Kjonstad & Willmot, 1995).

Bureaucratizing big data ethical routines can be very attractive by reporting to the public the code of conduct and the guidelines adopted when practicing big data analysis. Therefore, in practice, when managers are facing pressure, which is natural in a challenging competitive economic landscape, "some moral dilemmas will rise and will possibly be ignored when sustaining their decisions upon the simple definitional rules" (Kjonstad & Willmot, 1995, p. 448).

Hill & Rapp (2014) argue that the current set of codes of conduct are primarily reactive rather than proactive, short term oriented, descriptive instead of reflective and focused on individual behavior over collective impact. They propose a new approach about codes of conduct that should be built from a bottom-up

perspective of the organisation, because "many formal statements of values are ignored unless they are the product of the company as a collective" (Hill & Rapp, 2014, p. 622).

Although part of the responsibility of ethical behaviour comes from managers, employees as internal stakeholders are also expected to translate this ethical guidance speech into their daily actions (Brunton, et al., 2015). This kind of employee engagement "relies on the belief that the sense of moral rightness comes not from the indoctrination of abstract principles but yet the practices are rooted naturally in the conditions of human existence" (Hill & Rapp, 2014, p. 622). Hence, the culture of engagement can be determinant on building trust in consumers as well as those who take action inside corporations fostering ethical reflection and democratic decision making on the side of the company that will ensure the privacy rights of consumers.

A cross-industry study developed among financial services, direct marketing and information technology industries by Jin & Drozdenko (2003; 2010) and Jin et al., (2007), showed consonant results around their recommendations for transforming the organisational cluster from hierarchical, procedural, ordered, regulated and structured towards an organisation that is trusting, equitable, enterprising, collaborative, sociable, creative, stimulating and relationship oriented concluding that those actions "could increase the levels of social responsibility and reduce the risks of unethical behaviours" (Jin & Drozdenko, 2010, p. 354)

These studies also show that the hypothesis that a mechanistic or bureaucratic organisation with a hierarchical structure tend to have more difficulty on promoting managerial ethics and social responsibility, given the gap between the generally accepted ethics and the restrictive bureaucratic control. Therefore, blocking organisations to develop more social responsible actions (Jin & Drozdenko, 2010).

Noland & Phillips (2010) conclude their discussion about stakeholder engagement by saying that the stakeholders that constitute firms are individuals who have names and faces and that one of the roles of business in society is the pursuit of a better life of all individuals involved in the business activities. Noland & Phillips (2010) point out, that there is no miracle solution for the problems business faces today, but promoting stakeholder engagement is a good starting point.

This is important to this work because, given the increasing need to access, report and engage internal and external stakeholders, all these actions must have a purpose for the company and the purpose that this work chose, is that big data practice is a new field of practice within the organisation and this new activity will raise many organisational challenges for the entire corporation. Thus, having engaged employees that are committed not only with financial performance and result-driven, but concerned with corporate values and aware of the consequences of their work is crucial to work on the transition from gut-feeling decision making to data-driven decision making.

4. Framework

A big data project can put customer/user/individual privacy at risk if not developed internally very well, being a potential tool for a new scandal with some of the features we have seen previously with Se&Hør. CSR related activities rise as a way to promote corporate performance and protect the organisation from new scandals. Engaging internal stakeholders through fostering ethical reflection, honest and productive practices and accountable actions is how Aller Media A/S can start implementing CSR practices for such activities. The empirical material gathered intend to show how managers present their perceptions about what it is to act ethically and according to consumer/society expectations and also how they connect CSR activities and big data practices.

We will adopt privacy as the main issue that big data raises among individuals (Jerome, 2014; Richards & King, 2013; Richards & King, 2014). The harm on privacy can be understood under the categories of: security, identity, ownership, reputation and transparency (Richards & King, 2014; Dwork & Mulligan, 2013). Each of these issues can be more or less relevant (level of impact) for each stakeholder involved in the big data analysis, but can lead to a new privacy scandal if mishandled by employees.

When corporate actions are shocked by bad managerial actions resulting in public scandal, internal practices need to be adopted in order to avoid new public scandals, meanwhile, through developing new ideas and entering in new environments as the digital media and big data practices, new risks rise and the necessity to nurture good practices in order to avoid new mistakes is bold.

Several authors defend that neither standardized codes of conduct (Kjonstad & Willmot, 1995) or bureaucratic and mechanist organisations (Jin & Drozdenko,2003, 2010); Jin, et al., 2013) can afford the right work environment for employees to develop ethical actions and keep them engaged with the companies mission, vision and values (Hill & Rapp, 2014; Ripley & Ripley, 1992).

Hence, in order to maintain good practices in these new activites that put a lot of power (in form of personal data) on managers and other employees' hands, internal corporate social responsibility actions are required (Dillard & Murray, 2013; Okpara & Idowu, 2013) in order to engage the internal stakeholders (employees) (Freeman, 1984,2004)

Stakeholder engagement is a suitable theory in this case because: First, the big data project is being implemented in Royalista, a small brand inside the innovation department whose structure is more open and engaged when comparing into the siloed organisation of the core business departments. Innovation department managers expect that this case works as a proof of concept on shifting from gut-feeling decision

making to data-driven decision making. Second, if the project's 'hanging fruits' show its values about the quality of the decisions that are made with a data-driven mindset in comparison with decision-based on gut feeling there will be an expansion of the big data usage within the organisation and there will be a process of knowledge transferring from one silo to another. While Royalista has a small and engaged team, expanding the project means going through all brands of the core business involving more people in the project that have different interests and different goals concerning the implementation.

Through the empirical material the authors intend to see the connection between the current managers opinions and the big data practices in order to support a guide for CSR implemtantion focused on mitigating the possible risks that big data imposes.

5. Methodology

The research question leads us to analyse attitudes and behaviours of social interactions within one organisation, Aller Media A/S located in Copenhagen, Denmark. Due to the ongoing project of implementation of a big data analysis tool that has the goal of enlightening the decision making process by crossing multiple variables of internet consumption and tracking consumer behaviour, while users interact with the brands' website, rather than trusting the gut feeling bias decision. This big data tool can help with the creation of new products and brands by using the insights created through the analysis provided by the tool.

5.1 Philosophical analysis

To better understand the object of study, the authors see a need to state some philosophical assumptions in order to enhance the quality of the work and the creativity of the research by Easterby-Smith, et al. (2012). The authors decided to adopt a normalist perspective to analyse the object of study by Easterby-Smith, et al., (2012).

That is because big data analysis, even though being performed by a complex combination of software and hardware infrastructure that deal with complex algorithms, is a result of the interactions and efforts of individuals inside a corporation. They seek to create new processes and new culture inside the corporation in order to generate innovation in a changing environment as is the media industry, here "big data is a

cultural, technological, and scholarly phenomenon with its own mythology about the untold value of data" (Jerome, 2014, p. 214).

The qualitative research can offer this level of understanding by going further than quantitative research reasoning. Qualitative research stresses the understanding of the "social world through an examination of the interpretation of that world by its participants" (Bryman & Bell, 2011). In this case the big data tool implementation in a traditional media company, that previously dealt with privacy issues which resulted in a public scandal.

We can interpret the big data platform from two points of view. On the one hand, we have the corporation which is implementing the big data tool, where the process of implementation is a product of social interactions within the workers from different departments and backgrounds that will join efforts to design the tool. Hence, big data analysis tool is an object created to interpret consumer behaviour but biased in the participant opinions upon what is relevant data to analyse and what is not. "Both datasets and the algorithms reflect choices, among users, among data, connections, inferences, interpretation, and thresholds for inclusion that advance a specific purpose" (Dwork & Mulligan, 2013). On the other hand, there are the individuals that with their interaction with other individuals generate data in all kinds of sources, whether by online or offline. This generated data will be collected by the tool according to the relevance. Individuals who can also be consumers of a brand are the ones that take part on building the brand image by interacting with the brand and consuming their products and/or services, constructing a certain perception of the brand.

Thus, considering the given understanding about the construction of the tool and the construction of the brand image, a constructionist approach of this phenomenon will be the guide for the research. Bryman and Bell (2011) when discussing the relationship between ontology and epistemology, present the idea of competing paradigms in science, mentioning Khun's work of 1970 to stress two assumptions of a paradigm: objectivist or subjectivist, this will lead to other six categories: regulatory, radical, functionalist, interpretative, radical humanist and radical structuralist.

This research will follow the subjectivist interpretative paradigm where, as said above, organisations are the result of interactions between social actors who work within them (Bryman & Bell, 2011). Hence, the interpretative paradigm appears as the best suitable option. By interpreting all these interactions between consumer and corporation generated by the implementation of a big data analysis tool, the authors intend to understand the ethical issues that can rise when operating this tool in the attempt to understand how these ethical issues can affect brand image as well as understand what are the possible ways to deal with these ethical issues originated by big data are.

Therefore, we can say that the unit of analysis is the ethical discussion around the usage of big data as a new tool, where unethical misuse of the tool can put the reputation of the company at risk, this in turn can jeopardise the corporate plan to keep going with the strategic plan of migrating from printed to digital media.

The decision of using a participant observation method was chosen, because differently from ethnographic method; the participant observation is performed over less time but still within a sociological setting, e.g. an organisation in this case Aller Media A/S. The overall goal is to observe behaviour within the organisation and with a subject at hand (Royalista's big data project). It was chosen to have unstructured observation as this will encourage the interviewees to elaborate more about the topic. Several researchers have taken the participant observation in this type of context. (Easterby-Smith, 2012) Define participant observation as:

"(…)participant observation where the researcher can become part of the process of constructing and transmitting stories, or they may be collected through interviews by asking people for the stories that they have heard about particular events" (Easterby-Smith, 2012, p. 115)

This argues for the use in a context where the authors are part of the social setting for 5 months, meaning that it would be beneficial to do a for participant observation instead of ethnographical study. Further argumentation can also be found in the literature by Easterby-Smith (2012, p. 116) that offers an example of CSR and the use of semi-constructed interviews in order to get the managers perspective on CSR and the variations of how they saw it in and how this reflected on the company's overall communication of CSR-related activities.

Therefore, we can also justify the choice for a qualitative study based on a participant observation with semi-structured interviews, because the company does not have a formal set up for CSR practices. Without this formal structure it would be difficult to perform a survey in order to evaluate how social responsible the company is perceived by its employees in a broader perspective. Moreover because the big data project was an initiative from the head managers of the innovation department as an attempt to show the results to the Board of the company in order to prove that such a practice is worth implementing in all other brands of the company. Hence, the choice for the qualitative study was made in order to dive into the interviewees' opinions searching for the differences of opinions and perceptions in order to further analyse it in the empirical section.

Both Easterby-Smith (2012, p. 269) and Bryman-Bell, 2011, (p. 437) have types of participant observations.

Chosen from both sources is "participant as observers" (see fig. 3). This role is the same as the "complete participant", but members of the social setting are aware of the researcher's status as a researcher.
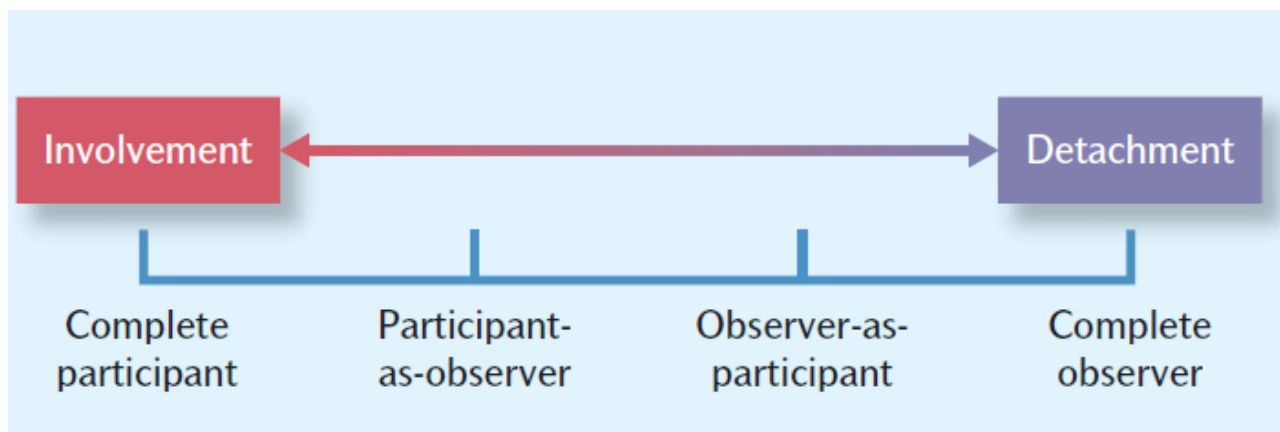

Figure 3 Source: Bryman-Bell, 2011, p. 437

Even though participant observation seems very suitable for this work, the authors had serious doubts about if this research would be best labelled as Action Research, since the authors took part in meetings and tasks regarding the big data implementation project.

Action research has no specific definition Bryman & Bell (2011) say that action research varies from one object of study to another (companies, public organisations and others) but can broadly be defined as "an approach in which the action researcher and a client collaborate in the diagnosis of a problem and in the development of a solution based on the diagnosis" (Bryman & Bell, 2011, p. 454). Easterby-Smith, et al. (2012) complement the definition of action research as the "particular method that is about change and intervention within which researchers and practitioners work with practitioners on matter of concern" (Easterby-Smith, et al., 2012, p. 454).

The willingness to implement big data practices project by the Innovation department was a challenging task since the first steps. One of these challenges was regarding the ethical guidance the project should had, concerning the previous personal data scandal the corporation already faced (as already presented in the case chapter). So the dual role of the authors was to work as facilitators for the conversations about the project within the possible data science companies as partners as well as to better understand the bigger picture of privacy and ethical guidance of big data, providing action plans of how to use business ethics in this area.

After stating this, the action research appeared to the authors as the most natural path to conduct the research because "action research offers a unique opportunity to bridge the divide" (Zhang, et al., 2015) between theory and practice, especially when regarding the new phenomena of big data that is becoming so popular among companies. Still, not so well explored by business researchers, even more when regarding ethical discussion in business, where the intention is to not limit the actions of big data, but, to leverage the discussion about it.

Nonetheless, when comparing the two methods (action research and participant observation) and the results of the research performed on the organisation, analysing the impacts of the research, it became clear that participant observation would be the most suitable method to use. This is because the authors performed the research more as observers and the results from the research show this rather than an action research where the core of this kind of research is an action that has the goal to impact organisation directly.

In this case the project of implementing big data had already started and followed completely the goals of the company and the researchers were analysing from outside, even though, taking part on the performance of certain tasks.

5.2 Empirical material and data collection

The empirical material required to achieve the research goals is, to a great extent, inside the innovation department of Aller Media A/S, where the authors of this research did an internship and also had part of the meetings with the innovation managers. Participant observation appeared as the most suitable path on this research because of the time constraint in developing the data collection. So the best method for data gathering was to take action in the innovation department (since February/2015) with the objective of developing critical knowledge around the big data theme and gathering useful data as well as to contribute to the development of the project within the organisation.

The internship had the duration of 20 weeks (5 months). The first step of the research was to set up expectations and outcomes both for the researchers and the managers of the innovation department. During the first meetings between the authors and Aller Media A/S innovation department managers, it was explained that the Master's thesis would contain reflexive material upon the subject, that the results of the thesis would not attend the business report format and that the research was carried impartially to avoid biased material and achieve the desired academic level. The managers accepted the terms and explained that the innovation department in itself has a very open-minded tradition which would help with the data gathering and in performing the research as whole, giving plenty access to information on the product and brand that would be object of the study.

Data was gathered through semi-structured interviews with the innovation department head of department, and the heads of products inside the innovation department, marketing department and business intelligence department. The semi-structured interview was the best method for the interviews with Aller Medias A/S workers because of the different background of each worker as well as the different roles, which would be affected differently by the implementation of the tool, requiring questions open enough to get to the desired point of discussion, but questions directed enough to maintain the focus of the discussion.

Names of interviewees	Age	Occupation
Mike Skytes	41	Commercial Developer at the Marketing department
Peter Wenneberg	33	Strategic responsible for social media
Kenni Larsen	26	Head of Market development at the Innovation department
Johan Malmsten	34	Head of Royalista and part of the Innovation department
Frederik Jensen	38	Business Intelligence Manager
Jan Henningsen	47	Head of Business Development at the Innovation Department

Table 1: List of Interviewees of Aller Media A/S

In addition, there is an interesting point that every employee at Aller Media A/S is also a consumer or user of the internet and they might be affected by the implementation of the tool from other companies as well. This might show a tension between the practitioner and the consumer that exists in each one of them. The semi-structured interviews also give more freedom to the interviewees to give their view on the subject of study (Bryman & Bell, 2011). The interviewees inside Aller Media A/S were selected following the criteria of: Level of involvement in the project and level of impact big data has on their work.

The rest of the empirical material is the Strategic Landscape (Appendix I) and the 10 managerial principles from Aller Media A/S (Appendix II). The first one regards the three years strategical plan to be implemented during the fiscal years of 2013-2015, containing not only the mission, vision and values, but also key strategical statements that serve as the guidelines for conduct towards its goals. While the 10 managerial principles are the fundamentals of corporate behaviour setting up what is expected from managers as leaders of the groups inside the company. The 10 managerial principles can be seen as well as the response of the Board of the company to the scandal of Se&Hør, where they instrumentalized the key expected behaviour of a manager inside the organisation. These two documents were used in order to understand better the ethical guidance of the company and prepare for the interviews.

It is worth mentioning also the result of the everyday work as empirical material which means: notes and perceptions about the meetings and action plans taken to implement the big data project, where notes and discussions were performed between the two researchers as well as among other practitioners. There are as well all the conversations and meetings with the consultancy firms and the data scientists, who were responsible to set up the big data infrastructure of the project.

The expected empirical material generated by the analysis of the interviews, the strategic landscape and the 10 managerial principles is to have an in-depth understand of how the strategic landscape and the 10 managerial principles impact the interviewees' actions when dealing with big data practices. Also the researchers were looking for employee empowerment and Stakeholder engagement concepts in their speeches to reflect upon the theoretical framework proposed and the theory used to build this work.

5.3 Reflections on the ethical dimensions of the research design

Let's begin with the corporate stakeholders, as our research will be developed inside a company. Even with all the freedom for research explained above and the aspects already touched upon, the authors have in mind that they will have double work with the thesis and then in parallel when the Master's thesis is done, with the business report that will be issued to fulfil the interests of corporation and show the findings of the research in a more practical way (Easterby-Smith, et al., 2012).

There is also a concern about the contamination of the results and the research as a whole when conducting this study inside the company and focused on a project that researchers and a company have interest on. Therefore, one of the main ways to avoid this is to keep the risk of biased opinions always in mind and be explicit in the intentions of the work for all corporate responsible and to be steady and committed to defend the research in all terms (Easterby-Smith, et al., 2012).

Agreement and transparency are the main guidance for the success of the thesis. This will also help to avoid the deception of the stakeholders upon the outcomes of the research when the results come not as expected by the corporate stakeholders (Bryman & Bell, 2011, p. 136).That is why the authors have to ensure that the transparency and the main intentions of the research.

Considering the ethics of the study, there is a special concern about the invasion of privacy of the participants as the authors will handle data from app users and online magazines readers run by Aller Media A/S. So, the

authors searched long time for the correct approach to use on consumers without harming their own privacy sphere (Bryman & Bell, 2011).

5.4 Reflections on the potential weaknesses of research design

First of all, the main concern of the authors in the research design was to maintain the work out of bias opinions as the involvement in organisations can contaminate the collection of data as well as bias author's opinions and reflections. The best way to avoid this pitfall was always by keeping self-awareness of the roles as researchers and practitioners and to stand for the quality of the research.

> "(…) the researcher has to have good facilitation skills, and the ability and flexibility to alternate between the roles of co-interventionist with practitioners and academic researcher who steps back and derives abstractions about the immediate experience." (Easterby-Smith, et al., 2012, p. 415)

Other problems of the data gathered in the interviews and action taken at Aller Media A/S, could occur during the process of data gathering that could lead to unsatisfying results or to not fit the purpose of the research, e.g. the participant observation could fail as the whole department could not accept the presence of the dual role as researchers and practitioners or even the big data project in itself could bring a lack of confidence in the workers, especially those who would be affected by the tool.

There was also a concern about the status and the power of the innovation department, as one independent department supported directly by the Board of the company. This position can raise some kind of conflict between other departments within the company, harming the participative observation (Easterby-Smith, et al., 2012; Bryman & Bell, 2011).

The problem with the interviews, semi-structured and unstructured, is that the data collected in this part of the process could be insufficient, forcing the authors to find more interviewees. Taking this into account, serious problems could have risen due to time constraint to do the research (Bryman & Bell, 2011).

6. Empirical Analysis

The empirical analysis intends to answer the research question by connecting the empirical material gathered through the interviews and analyse them with the theory presented in this work. In order to answer the RQ**: How can ethical issues derived from big data practices justify the initiation of structured internal CSR actions based on internal stakeholder engagement in a traditional media company?**

The first step of the empirical analysis will start with the explanation of the Innovation's department and its current structure and how this department differentiate itself from the rest of the organisation. The second step will discuss how the big data project is structured and the main characteristics of the brand chosen to be the pilot and how the big data tool will work as well as how it will change the way data analysis is made. The third and final step will connect the first two steps with employee interviews in order to explore their perceptions about big data activities and how they think it should be carried out internally in order to create safeguard to avoid further public scandals related to such activity. This third step will also take into consideration the existence of the code of conduct, the 10 managerial principles and the strategic landscape proposed by the CEO and the Board of directors.

6.1 The Innovation department at Aller Media A/S

This part of the analysis is to give the reader an insight of the organisational design of Aller Media A/S based on participant observation.

Aller media's organisational design is constructed in the way that they are the core business (printed media) the supportive functions and the commercial department. (see Appendix III).

The innovation department functions as a start-up company, with the support of the core business, even though financially it is not part of the core business, but in reality a subsidiary company of Aller holding A/S, the mother company of Aller Media A/S.

The core business has a "silo" organisation, meaning that the department only refers upwards and not across the organisation. A different way of defining this is as a top-down organisation management, as the managers only refer to their direct supervisor.

The organisational set-up for the Innovation department is the opposite, meaning that they function across the department, in brainstorm activities, multidisciplinary assignments that requires the need to involve

other resources within the Innovation department. The fact that there are staff meetings on a monthly basis, where the agenda is based in the whole department knowing the status of current project throughout the department, means that the innovation department nurtures employee engagement, as any opinion and creative thoughts can be directed to the brand/product owner or manager in the department a mantra that the director of Innovation Pernille Aalund lives by.

The insights that the authors have seen through observation when regarding the core business is that it is "task" oriented, where the biggest concern are the down going sales quotas. The former "cash cow" for the company, and the main focus for the company in this retrospect, is to gain as much sales from the remaining market before the organisation is forced to change from printed to digital media/content. This is the main object for the Innovation department. The following interviews will provide the insights that will support the claim of a task oriented view in the core business and a more open, employee engagement, oriented view in the Innovation department.

6.2 The brand

Royalista.com is a digital news portal about royal families around the world. Their mission is to be the go-to place for royals' fans and those who are interested in news about royal families. Their target audience is to reach people all around the globe who are interested in royal families. The brand is one of the projects that passed through the funnel of innovation ideas over the Board of innovation in Aller Holding A/S, composed by members of the Board of Aller Holding A/S and also outside participants that are recognised as innovative thinkers in Denmark.

Royalista's team is formed by the Head of product Johan, chief editor, ae journalist team and a web development team. The small team and the low hierarchical structure allows the free flow of all employees and the involvement in all questions of the team, of course each one following each task assigned, but still a very open organisation, where each one needs to be engaged to the project to deliver the expected results.

6.3 The project

After the pilot Royalista.com started its activities in April 2014 and the website had more than 15.000 unique users per day in August 2015, the successful strategy of targeting the audience also brought some surprises and challenges for the brand, unexpected audiences from countries outside Europe and North America, brought a different level of complexity, since they are unknown markets that have complete different preferences.

The big data project started as a need to understand better the audience and also create a solid revenue stream for the growing brand because Google analytics and other online tools were inconclusive or offered

too sparse data about the audience. The decision to adopt big data came with the need to transform data into valuable structured information, also the expectation that the project could enhance user experience on the website and at the same time retaining more users could mean more potential customers and growth in revenue.

After the definition of the scope of the project together with the data science consultancy firm, a framework to design and build a scalable architecture for advanced web analytics was proposed and it was divided in three phases:

Phase 1: Real-time data gathering pipeline, experimentation framework and most popular recommender as the baseline.
Phase 2: Content based recommender offering related content.
Phase 3: Behavioural based recommender and its personalized variation.

The expected outcome for this project is to have a clear understand of Royalista audience, in order to offer better content, increase sales in its web shop, increase user engagement through user registration and consolidate revenue streams for the brand.

These expected outcomes will work as a proof of concept that big data works as a data tool offering solid insights for data-driven decision making opposing the current process of decision making that is a mix of gut feeling from the manager together with the data and reports available.

6.4 The employees' perceptions
6.4.1   Big data implementation, usage and clash of opinions
We can start the analysis of the interviews by showing the point of view of the personnel of the innovation department and what are their expectations about the big data project are. Below we will start with Jan, the Head of the innovation department:

"Big data project can enhance the speed of project development and I believe to where we are now it is a very innovative approach to actually boosting business. Learning not only what our audiences want, but also learning how to learn that, learning how to measure that, how to aggregate that data and how to structure that data, so that we can be able to move accordingly."

Kenni, Head of market development for the Innovation department, sees big data as a path through complexity for decision making: *"Big data can drive innovation in terms of getting insights about our*

existing customers, what they want, at what price level in order for us to be more specific about the services we offer in the future and the tools and everything related to that. Make more segmented/relevant services for our customers. I don't think that data is the solution for everything in the world, but it can be a decision supporting tool and it can guide us in the right directions in complex decisions when we prioritize between all the ideas from employees and external partners."

Johan, Head of Royalista.com, reflects upon the fact that big data even though it surges as a way to cut through complexity, it can also create more complexity: "*This project is a need for long term, transferring more knowledge for the Royalista team. It can increase complexity if not well managed, if you look at what Amazon is doing it, is very interesting and in the consumer's perspective it makes everything easier, it seems very smooth but there is a complex engine behind it; it cuts through complexity but it adds complexity too*".

These statements are very useful examples around the concepts discussed in the theory by Boyd & Crawford (2012) and Crawford, et al. (2014), about the belief that big data is incapable of lying and that its application means trespassing human rationality creating an unquestionable truth. Jan, Kenni and Johan show the belief that big data will change the way decision making and how business is made, where they think that by using big data decisions, will be better taken and complexity will be simplified. This point of view from the interviewees confirm the reflection, because in their speech they think that human rationality is not enough to cope with business complexity and that the big data practices would overcome these barriers and guide them towards a better decision.

As we have seen above, among the three managers of the innovation department there is the belief that big data can offer better information and help the organisation in harnessing the potential of new digital products by offering better insights. However they also show some concern about the level of complexity added by this new product. The organisational challenges surge as some of the crucial points as Jan states his opinion about the difference of the organisational cultures between the innovation department and the core business departments.

Jan says that he cannot evaluate how much the project will affect the organisation as a whole but he is sure that it will affect them: "*I see this as a potential transformation to many of the structures and most certainly the cultures of the organisation, definitely. I don't know if actually they realize at what level this affects the organisation, I doubt that they really do. If this is a real success it will definitely affect both structures and cultures within the whole organisation*".

Kenni, also sees that the traditional structure will be challenged by the new practices and that even the Board of directors lacks knowledge to conduct such change: *"I don't think they are afraid of big data, They don't know where to start and how to handle it, because they don't have the experience and have never been working with data before, they are from the old world where we didn't have data"*.

At this point let us just remind the reader that the innovation department was created with the intention of accelerating Aller Media's transition from printed to digital media by creating new products, brands and operations in order to unravel this complex task that is finding solid revenue streams in the new digital markets within media industry.

The tension between the pressure about creating new products and forms of interactions with customers/users in the digital field and the actual marketing practices of the printed media can be a good example about the managerial expectations, employee practices, ethical behaviour and the usage of big data analysis, since it show us that, as technology disrupts business models, employees face pressure from the organisation in order to secure the current revenue streams and market share. The innovation department with its current structure faces the pressure of creating new products, while the core business departments, receive an extra pressure which is managing brands and products that are performing under budget expectations, since, printed media revenue is going down as we exhaustively mentioned here.

Mike, one of the Heads of the marketing department which is part of the core business stake of the organisation, makes a statement about the publishing industry: *"It's not the metaphor to use but, I can't resist the temptation, if we were still in the titanic, then we need to start building another boat and start sailing out from there, because this one is going down. To be able to make that new boat relevant we need to look at big data to be able to find out what direction we are going to sail"*.

This change of consumer behaviour by diminishing printed media consumption and incrementing digital media consumption raises the necessity to create new products as fast as possible. The theory of Kjonstad & Willmot (1995), shows that employees in more bureaucratic and mechanistic organisations, when under pressure, tend to sustain their decisions under simple definitional rules so they can get the result expected by managers.

This simple definitional rules to deliver the expected results appear very clear in the following statement from Mike: *"I mean, all we need is rules to be put in place to be able to ensure that this doesn't happen too much, plus of that, I can turn off the television, I can also unsubscribe or drop out of Facebook, I don't have to be there, I don't have to take part, but because people are there and they want to share their entire lives on Facebook, more fool of them, if I can get data based on their lack of inhibition then I will go for it"*.

This statement confirms the clash of opinions between the different departments, of course we need to consider that the level of involvement in the big data project also affects the level of knowledge about how the tool will be managed. But, the interviews were not focused in the technical features of the tool, yet, the focus was to encourage the reflection upon the usage of the tool and this is where the tensions and differences rise.

This is the point where stakeholder engagement and corporate social responsibility theory fits into the ethical guidance of big data, by assessing the social process in which this data is generated, engaging the employees involved and granting that the assumptions and actions based on the data analysis will not harm users/customers and will deliver the exact expected information.

6.4.2 Data governance and CSR actions

We will follow the analysis now by diving in the perceptions of how transparency, accountability and ethical data manage should be carried at and how CSR actions should be implemented. The CSR discussion among the interviewees had different outcomes because the company does not have a formal framework to exercise CSR practices in any level or field of action. At least no formal structure, neither actions were mentioned during the whole participant observation, neither during the interviews with managers. This resulted in an interesting mix of opinions, demonstrating their opinions about practical approaches of transparency/CSR actions and also reflecting the current internal structure of accountability.

We can start by showing how the interviewees see that accountability and transparency should be carried inside and outside the company. Johan has the opinion that transparency and accountability should be exercised in a more open and participative way, so users could understand better how they are contributing with their data and being able to choose how to participate: *"What I rather prefer is in some sort of way a communicative and maybe a dynamic way of collecting data in the sense that it explains clearly the steps and why data is being collected rather than to store a lot of data and then figuring out what we can do with it. I'm also persuaded by how professional the website looks and how professional they communicate (the process)."*

This could be related to the actions of transparency mentioned by Richards & King (2014) where this exercise needs to protect users, but as well the technological assets the organisation had invested and created with the new tool. It can alsobe related to stakeholder engagement theory, where through a dynamic and explained way to collect data, the company is fostering the participation of the external stakeholders in the process.

We can also analyse this statement with the theory of ownership and reputation (Nunan & Di Domenico, 2013), where according to Johan the company should not focus on the maximization of data gathering, instead, design the tool with the desired scope of what the company needs. This is a way to protect user, since building large datapools without scope, can mean more possibilityto harm user privacy.

Kenni also shares Johan's point of view when it regards to exercising transparency for users: *It is important to tell people why we do it and that we don't have a hidden agenda with collecting data, we don't sell it to other companies(data-brokers). We should use it to make better product basically and target content more specific to every individual user."*

While Kenni and Johan converge on how data gathering and analysis should be performed and how accountable it should be, Mike's opinion goes towards the competition environment. In his opinion exercising transparency is more a way to look good than actually being good with customers/users: *"I'm still sceptical, in terms of, when I for example, choose to update the software on my smartphone, I mean, I'm not going to read the sixty two pages of Apple terms and conditions before, I just want to do it, I want to make it easy, if I look at it, I will see pretty much I'm signing my life away for Apple. They get 10% of everything I download from them, etc. So how to be transparent when Apple is in control? How transparent will they be? Because in the end if they don't play and Facebook don't play and Google don't play, I mean, you've got the holy triumvirate there and you are basically way behind if you don't play along with them".*

This point of view of the competition brings again the discussion about the employees that, under pressure, tend to simplify the ethical reasoning in order to maximize the benefit of the task (Kjonstad & Willmot, 1995; Jin & Drozdenko, 2003). To increase the competitiveness of the company, by obeying the basic codes of conducts and ignoring moral reasoning, employees put at risk the whole organisation by not considering all impacts of their actions as stated by Hill & Rapp (2014).

Thus Mike also thinks that the pressure from stakeholders will promote changes in management and transparency of big data practices: *"In the end it is also important for companies to have a clear policy that is in a simple and understandable way. (…)I think that in the future increasingly people are getting wise to it, they are using ad blockers and they don't tend to click on offers or websites where they feel that there is no reputation or they don't feel confident in the way they are using information for".*

Mike's opinion can be linked with the main discussion of why CSR is important and what is the role of CSR in organisations. It can also be linked to Shaw, et al. (2006) idea of "buycotting" and how consumers use their power of decision to punish irresponsible companies that act unethically. Nunan & Di Domenico (2013), Richards & King (2014), Crawford, et al. (2014) and Boyd & Crawford (2012) point out, if companies do not

engage on best practices, securing user privacy and not harming individual freedom with big data practices, the future can be shady and suspicious for customers and users. It also can be related to Alcañiz, et al. (2010) theory where they say that CSR practices build social capital among consumers building more trust on company's activities.

A company that is shifting from printed media towards digital products, specially having a previous scandal in the back of customers' minds cannot risk the brand with unethical practices again. So, according to Brunton, et al. (2015), internally it is important to exercise the engagement of the stakeholders in order to get clear standards of what are good practices and how it should be implemented.

Below we will continue with the interviews by showing how esparse the opinions of managers about how this exercise of accountability, transparency and engement should be performed internally are. We will start with Johan, as he is the manager of the product that is going through the technological change: "S*o I think it is an opportunity and we need to jump on the train sooner or later and yes this open room for possibilities and responsibilities, right? in that sense it is a lot of stuff that you can misuse, so I think we need to have a good ethical compass and I think as long as they're controlled by products/brands that are passionate about what they do and they feel responsibility towards their audience I'm not afraid of it"*.

The opinion of Johan goes towards the theories of Freeman, 1984,2004; Jin & Drozdenko, 2003,2010; Jin, et al., 2013 where companies that practice engagement among their employees, are more open structures, rely on building trust and instructing employees rather than giving orders and setting up only financial goals and regulation restrictions. These companies perform better and it is proved by their studies that these organisations have better corporate social responibility results and less ethical issues.

We can also use Dillard & Murray (2013) reflection upon the rights and responsibilities of an organisation, to explore the necessity of creating a CSR structure for big data, where a given company should always be aware of the rights that are granted, in this case, exploring personal data in exchange to creating better products for the user/customer and promoting organisation's profit growth, while the responsibility of these rights is to protect user privacy and exercise transparency in order not to harm the individual's freedom.

Johan also contributes to the discussion from his point of view by describing how the core business departments with its silo/bureaucratic structure and task oriented mind can be negative inside the company when handling the big data project*: "I think what could become an issue is that if you have an isolated department like marketing department that don't really have contact with the end customer, they don't feel any kind of responsibility towards the end customer. They are only making sure that what they are doing is legal, and they are only worried about reaching the budget and making sure that what they are doing is legal*

so they can cover their backs, whether is something that the end user short term appreciates, whether if there is something unethical in that relationship, might not be that much on their concern because that is not their job to focus on. So the way the company is set up in its core business with marketing department working with newsletter is disconnected to the actual actions of the brand".

This is in the core of why to practice CSR, since the involvement with the reasoning of the ethical behaviour of the company should be promoted among all the employees. Without an agenda with clear goals and the engagement of all stakeholders of an organisation, there hardly can be ethical reasoning required to secure the practices.

Johan is also aware that the current structure of the brand is different because it is a small team, independent of the organisation and more flexible when it comes to the delivery of results, as inside the innovation department, all products are treated as experiments: *"It might there not be a lot of involvement and some sort of responsibility towards the end customer so the brand is a little bit bypassed in that relationship. So we in Royalista are both the marketing team and the product owners, so in a more holistic view it makes it easier in setting up some sort of compass in terms of feeling the responsibility towards the consumer that we should do stuff that we can stand up for and can be proud of reaching the consumers wants."*

Even though he shows awareness about the engagement of his team, the silo mindset appears when he compares the department using the terms 'we' and 'them'. Inside the innovation department there is a strong engagement between workers but this same engagement feeling does not link them with the rest of the company, thus, CSR stakeholder engagement should be exercised in order to break all the barriers between departments.

While Johan chooses a more participative and informative way, Kenni goes towards the normative approach, when asked about how and why the company should implement transparency internally: *"We (Aller) should have a code of conduct and I think we should tell the customers what we track and why we do it. And I think why we do it is the most important in order to get back to transparency. We use the data that makes sense in order to fulfil our purpose of entertaining our customers that should be the goal".*

Although the intentions around the normative application of ethical behaviour expressed through a code of conduct are good, according to Kjonstad & Willmot (1995), the current structure of the organisation will hardly absorb and exercise a new code of conduct related to big data practices. As Jin & Drozdenko (2010) commented; bureaucratizing practices are not the form to stimulate ethical actions of employees. The quote from the interview with Mike written above showed that when under pressure, employees will rather choose

to deliver the expected result than choosing to make the ethical choice, since the second option is not encouraged by management.

Jan also goes towards the direction of the engagement and the stimulation of the good practices like Johan: *"I don't believe that there are bad or good people in the organisation, it is just that they could be under pressure with the tasks they were given and they are not able to perform their tasks very well and if their manager does not perform a good job as manager on guiding him, so they can feel pressure in a way that produce bad edition of their personality.(…) people tend to deliver better when the environment is constructive and if you have the values aligned it is easier, but if you have to read the managerial principles to understand, maybe this is an issue.*

When the interviewees were asked about how the company should exercise the existing codes of conduct and the managerial principles when regarding the big data practices there were many opinions. Jan says: *"I believe it is important to have some kind of continuity between me as a manager and my values, the way I communicate, the way I treat people working for me, needs to be in some kind of way harmonised with those managerial principles, because otherwise you have a discrepancy, that means: over here you have the principles saying how one should act and over here you have the culture and the values I live amongst other in the everyday life of the company. In the end of the day I believe the letter will determine how my actions would be? How is the culture? Is the culture representing the values that lie beneath the principles? Is it aligned with my principles?"*

In Jan's opinion, there is no such specific actions around big data, but rather, an exercise that begins with finding the employees that are aligned with the values and principles of the company and go along with the everyday actions, where managers are problem-solvers and help employees to reach their individual and group goals as facilitators and to guide towards the organisations goals, instead of a vertical, bureaucratic approach, where a manager is the one that assures that goals are reached through pressure over employees.

This can be linked to what was discussed in the theory section where Brunton, et al. (2015) talk about taking the CSR actions out of the paper and putting them in practice in the routine of the organisation while Dillard & Murray (2013) talk about organisations' rights and responsibilities and Jin & Drozdenko (2003, 2010) discuss how more horizontal and organic organisations have better ethical performance and better financial results over time.

Jan moves on by saying that the initial efforts of building a structured accountability system were made after the Se&Hør scandal: *"I understand especially after the Se&Hør scandal the necessity to point out and write it, I do hope that is accompanied with actions. I know that there has been an effort in that direction, I've been*

part of it with the top 20 management group and top management should be aware of any middle managers who does not live up to this. Those whose culture does not align with the principles and I do hope that the top management would write them out if their actions are too far away from the company's values or bring them to the right track if it is not the case, otherwise they will infect the organisation's culture".

Although initial efforts were performed, no continuous actions were made to build a formal structure. Also it is worth mention that according to Hill & Rapp (2014) CSR actions imposed from top-down in organisations, are less effective than those constructed with the participation of low level employees as well. This means, that even though the codes of conduct and the managerial principles were made as a milestone of ethical behaviour, this was made by the top 20 management of the company, not considering the employees point of view.

We can verify this when we look at Frederick's opinion, who is Head of Business Intelligence department, but not part of the top 20 managers. He understand that exercising the engagement of employees and promoting a CSR structure to offer the path for ethical practices to avoid data misuse, would mean more costs for the company: "*It is complex to build a process to stimulate transparency on data handling, it requires more people as well, because it is a new task, everybody is very busy in the organisation today, so it requires to hire a new person to take care of this part*".

In Frederick's point of view, operationalizing CSR actions for data governance means rising the company liability and inflating the organisation. He states, that "everybody is very busy with their own tasks", so in a middle manager opinion it is important, but it requires a lot of efforts that most employees are not willing to make as they are under pressure with their own tasks. Furthermore hiring more personel to perform the task would mean rising the costs of a company situated in a disrupted industry.

When asked to describe a system to operationalize the accountability and the CSR actions when regading big data, Kenni explains his approach, where rules and data gatekeepers should restrict the usage: "*You need some company guidelines and rules and those rules should lead to transparency and be clear of what you collect and what you do with data. Architecture around user roles and access of data should be created, granting access only to those who really have to use data, where people know of what they are using data for but there will still be a risk of people behaving only in their own interest. But I think you could use the CIA (even though there were past leaked information) as an example of level of permissions and access to data. But again, there will always be a chance of data leak. I think that also employee should also have a certain level or proficiency about data usage and how it should be handled, because for example we in the innovation department have some knowledge we use data for some decisions but it is not organized".*

Even though he explains the operationalization of CSR requiring gatekeepers and organizing a structure for reporting and accountability, he also claims that there should be correct recruitment of the employees responsible for the tasks performed around the big data practices. This seems redundant, but, in practice is not, because as Jan also mantioned in his interview above, making sure that big data practices will be carried out in an ethical way starts with selecting the right personnel with the values aligned with the company and the goals of the task to be performed.

Mike has a more broad vision of CSR practices as he states that this is the future, even though he still insists that there are more factors that will influence CSR practices: "*I think in the end the two things will meet, the companies will be social responsible for (hopefully) due to all these scandals (they will have to be) and people will be more conscious and they will not do anything that will risk that their information will be misused. That is probably a happy future… and naïve in a certain way*".

7. Conclusion

We can see that even though big data practices have already proven to have positive results for companies, there is still a long road to enlighten the myths and the aura that is built around the value of data, it also requires transparency and acknowledgements of its activities rather than obscurity of its operations and more than ever the assessment and ethical reasoning of the possible harms of such activities to individual freedom (Boyd & Crawford, 2012; Crawford, et al., 2014; Nunan & Di Domenico, 2013; Richards & King, 2014).

We also see that CSR in its essence is about the ethics of accountability (Dillard & Murray, 2013) and that it can work as a great tool to develop transparency over corporate activities related to personal data analysis such as big data. Engaging stakeholders (Freeman, 1984,2004) in a virtuous cycle is one way to perform the tasks in a responsible way, but it also challenges the current structure of bureaucratic and vertical organisations (Jin & Drozdenko, 2003,2010; Jin, et al., 2013), in order to adopt more flexible and horizontal structures.

The interviews with internal stakeholders at Aller Media A/S focused on the recent implementation of the big data analysis in one of the company's brand (Royalista.com), showing that there is a gap in the perception of what are ethical practices and how they should be framed in the structure, demonstrating the divergence between the innovation department structure and the core business departments structures.

This divergence of approaches and ontologies of how big data should be practiced within the company (if the pilot of Royalista succeeds), as well as what the new responsibilities of such activities are, permits us to discuss upon the implementation of CSR actions related to engaging stakeholders (Kjonstad & Willmot, 1995; Hill & Rapp, 2014). This is necessary in order to level up standards, practices and ethical reasoning among the company and in order to reach the goal of the transition from printed to digital media markets without putting at risk company's image, especially in a company that has previous privacy invasion scandals that were scrutinized by the public opinion.

The interviews also strengthen the concept of Kjonstad & Willmot (1995) that constructing only the normative guidelines of ethical conduct inside the organisation is not enough to secure that good practices in benefit of the organisation and stakeholders.

There must be a formal exercise to engage stakeholders, where managers play an important role in performing the practices and promoting the engagement of all employees over the goals of the company, always taking into account the impact and benefits for society.

Big data is the new hype word and a promising tool to increase revenues in a downward segment, such as the printed media industry. This industry faces competition from tech companies and other not previously expected stakeholders. These new competitors have much more know-how on operating with big data, and know how to navigate through these waters while Aller Media A/S needs to implement change towards this new culture in a very traditional organisation.

Internal CSR actions through stakeholder engagement can strengthen the ethically based decision making and guide actions of managers, securing that these new practices have a positive impact in order to maintain solid corporate performance throughout the years, while also engaging other employee levels to implement the mind-set change required.

This project also touches at the core of the organisation, since the current mentality is still very silo-oriented where each brand and department is focused on its own goals. While with big data activities, there is the possibility of cross sectional information exchange and it requires joint efforts from different departments and different brands within the organisation.

Additionally the authors could identify the differences between the more open and organic type of organisation in the innovation department and the more mechanistic, hierarchical and task-oriented departments in the core business. These differences must be reduced in order to implement a more holistic project of big data and to accelerate the switch from printed to digital media.

Therefore, the path to harness big data practices in a way that promotes good values in the company and society as well, passes through structuring CSR actions in order to implement actions that take into consideration the different stakeholders among the organisation, building transparency, accountable actions and the exchange of information in order to promote innovation of the products, going towards the so desired transition.

8. Limitations and further research proposal

This research focuses in the internal analysis of Aller Media A/S, meaning that the research looked at the organisation and its practices to understand if there were any gaps between the actions expected by management when dealing with big data practices and what employees and leaders practice.

The reason for using the managers as interviewees was based on the fact that they (managers and leaders) would be the first in line to guide the new challenge of implementing big data, as well as on a daily basis dealing with the negative social capital that the recent Se&Hør scandal gave to the company. The decision was to take managers from the innovation department, and the marketing department, not representing the full managerial resource that was within Aller Media A/S, however as the company is "silo-organized" the managers that would have any involvement with the big data project were the prerequisite for the interviews.

Another limitation of this thesis is that to access the complete impact of big data practices, it would to do necessary a more extended study in order to assess the whole process from the implementation, through the first results and then to the final analysis and opinion of the Board of directors in order to see what decision have been made with the help of the tool and compare them with previous decisions.

After the conclusion of the project a more extended study should be done in order to get an overall opinion from all employee levels, building a scale of the level of knowledge and the acceptance of that big data practices have along the organisation and also assessing the perception of how social responsible the organisation is for its own employees. Also, it would be interesting to perform a research of the internet users and consumers perspective in order to compare the results with the ones reached with this research.

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Appendices

Appendix I

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Appendix II

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Table of Figures