



# CCC 2018

Proceedings of the Creative Construction Conference (2018)

Edited by: Miroslaw J. Skibniewski & Miklos Hajdu

DOI 10.3311/CCC2018-045

Creative Construction Conference 2018, CCC 2018, 30 June - 3 July 2018, Ljubljana, Slovenia

## Trust: Work-related crime in the AEC-industry

Atle Engebø<sup>a,\*</sup>, Marie Hammer Iversen<sup>b</sup>, Leif Daniel Houck<sup>c</sup>, Ola Lædre<sup>a</sup> and Jardar Lohne<sup>a</sup>

<sup>a</sup>Norwegian University of Science and Technology, Høgskoleringen 7a, 7034 Trondheim, Norway

<sup>b</sup>Veidekke Entreprenør AS, Oslo, Norway

<sup>c</sup>Norwegian University of Life Science, Universitetstunet 3, 1432 Ås, Norway

---

### Abstract

In March 2014, the Norwegian newspaper Aftenposten released the first of 45 articles concerning the shadow economy of the Norwegian construction industry. It provided evidence that criminal actors continuously managed to infiltrate the construction supply chain. Therefore, this paper investigates the following research questions:

- 1) What are the main challenges regarding work-related crime?
- 2) How do contractors manage their reputation in the aftermath of work-related crime executed by subcontractors?

This exploratory study started with a literature review. It was followed by a case study based on a document study and 12 semi-structured in-depth interviews with representatives on strategic level. Some particularities of the AEC-industry makes it vulnerable to work-related crime. Complex supply chains, autonomous project managers measured on net profit, high weight on price etc. are examples of characteristics. The literature review reveals a knowledge gap regarding the current state when it comes to crime and crime-prevention within the industry. The findings indicate that the contractors managed the reputational challenges that emerged in the aftermath well on a strategic level. This was accomplished by clearly distancing themselves from the criminal actors within their projects, while still taking responsibility for correcting the situation. In this case study, the client even expressed increased trust in the major contractor after experiencing how the major contractor handled the situation. However such an approach might work the first or second time, but such an approach might work a couple of times, but with repeated infiltration of criminal actors the contractors have to do more than distancing themselves. Future research should focus on how contractors work to prevent work-related crime on the operational level.

© 2018 The Authors. Published by Diamond Congress Ltd.

Peer-review under responsibility of the scientific committee of the Creative Construction Conference 2018.

*Keywords: International construction issues; Work-related crime; Reputation Management; Trust*

---

### 1. Introduction

Construction companies can be difficult to manage because of complex supply chains, autonomous project managers measured on net profit, high weight on price etc. Another particularity, namely the construction companies' vulnerability for work-related crime, does not receive sufficient attention in project management literature. In March 2014, the Norwegian newspaper Aftenposten released the first of 45 articles concerning the shadow economy of the Norwegian construction industry. This paper presents an insight into a major scandal that emerged from the Norwegian construction industry, and how two involved contractors handled the aftermath.

The characteristics of the scandal revealed by the newspaper Aftenposten – hereby referred to as 'the case' – is outlined in the following. The case emerged during 2014 and consisted of a criminal network with a manager who systematically conducted tax-related crime and money laundering in the construction industry in the area of Oslo, Norway. The criminal network involved 37 subcontractors that consistently colluded with each other for almost a decade. The manager of the criminal network established- and ran the main company with the purpose of working as

an intermediary between the major contractors and the sub-contractors. The main company contracted so-called mailbox companies to perform the job. The mailbox companies' only purpose was to bill the main company so it appeared that VAT was paid. The contracted mailbox company withdrew the money that came into their account, without paying VAT to the state. Then cash was returned to the main company, which in turn could pay salary to its unofficial employees. The manager alone embezzled 41 million NOK (app. €4.25mill) through such operations. Two well-known major contractors with a decent reputation, contractor A, and contractor B were affected since they had contracted sub-contractors related to the network.

The Police investigations revealed that out of the 37 subcontractors in the network, 34 were mailbox companies. Eight were created with the use of false identity and as many as 24 of them had no registered employees. In reality, the manager controlled all the 37 sub-contractors. However, in the public information, a variety of persons appeared as owners. For example, the spouse of the manager was CEO in one of the companies. In the other companies, the manager used stolen identities. The investigation revealed, among other things, that one person was behind four different identities figuring in four different companies over several years. The manager acquired false documentation, green cards and Norwegian bank accounts for his unofficial employees. The manager also acquired D-number for his employees, which is required for all foreigners working in Norway for less than 6 months. Overall, the manager of the network arranged all practicalities for those who worked for him, from picking them up at the airport to accommodating housing. The manager was eventually sentenced to prison for 5 years and received a claim for a deduction of 14 mill NOK from the state. Furthermore, he was denied the right to pursue independent business activity permanently.

The revelation proved the possibility to operate outside jurisdiction for quite a long time without being compromised by the Police or by the major contractors, for that sake. Those who contracted the company profited, as the criminals actually showed up on time, cost less than their legally operating competitors' cost and did a proper job (they never got complaints on the quality of their work). The Government lost VAT, so the society as a whole did not benefit from it. For the two major contractors that had contracted sub-contractors from the criminal network risked a damaged reputation when the newspaper *Aftenposten* revealed their involvement. Therefore, this paper investigates the following research questions:

- 1) What are the main challenges regarding work-related crime?
- 2) How do contractors manage their reputation in the aftermath of work-related crime executed by subcontractors?

This is an exploratory study starting with a literature review and followed by a case study consisting of a document study and 12 semi-structured in-depth interviews with representatives on a strategic level.

## 2. Methodology

This case study provides an empirical insight into the particularities of organized crime in construction and how the actors handled the aftermath. According to Yin interviews is one of the most important sources for acquiring knowledge and information in case studies [1]. Semi-structured interviews allows the interviewee to elaborate, even though the questions are set up in advance [2]. Furthermore, it permits asking relevant follow-up questions that may enrich the empirical data. The topic of the study is of such nature that it is a possibility that the answers the given were not completely honest, or not detailed enough. Therefore, the opportunity to ask follow-up questions was seen as a necessary advantage in this study. Furthermore, the interviews was conducted with four different groups, which creates data triangulation [1, 3]. Table 1 shows the different actors interviewed and number of interviews.

*Table 1: Actors interviewed and number of interviews*

| Number of interviews | Actor                        |
|----------------------|------------------------------|
| 2                    | Contractor A (including CEO) |
| 3                    | Contractor B (including CEO) |
| 3                    | Involved clients             |
| 3                    | Non-involved clients         |
| 1                    | Investigator (police)        |

The interviews lasted between 20 and 45 minutes and were conducted with the use of a recorder. The use of a recorder was considered convenient in order to interact more freely with the interviewees. A possible source of error using a recorder is the possibility that the interviewees withhold information. All interviews were transcribed and the resume was sent to the interviewees for acceptance. Because of the nature of the study, it was considered necessary to

keep the interviewees anonymous. This decision was made in order to extract the necessary data while avoiding potential negative consequences for the interviewees.

As a supplement to the interviews, the research consisted of a document study. The documents that were studied were both case-specific and non-case specific. The case papers consisted of a comprehensive description of the whole course of the case and the course of action, and thus a study of these has been indispensable in order to gain an underlying understanding. In the investigated case, information about the case primarily derived from case-specific documents (27,061 pages). The case-specific documents were supplemented with the experiences of the police investigator and *Aftenposten* (Norwegian newspaper) article series “The grey Economy”. Information obtained from *Aftenposten* has been checked against the criminal records. The *Aftenposten* paper edition contained 45 Articles from March 26, 2014 to April 7, 2015. The verdict is published without restriction in a public data base of LovData [4].

### 3. Theoretical framework

Many different improprieties may occur in the construction industry. Such improprieties range from operating in ‘grey areas’ to illegal practices [5, 6]. Engebø et al. revealed that surprisingly few contractors have ethical frameworks that differ between “grey areas” and illegal practices [7]. Le et al. offers a comprehensive review of corruption in construction [8]. Two prominent categories of corruption in construction is ‘fraud’ and ‘collusion’, with ‘fraud’ being misconduct in form of misinformation, deceit and theft, and ‘collusion’ being forms of secret agreements with a fraudulent or deceitful purpose [8]. A concern identified in the literature is the forging- and altering of invoices and money laundering [9-12]. Furthermore, such fraud can occur during every phase of a construction project [13]. For the Norwegian construction industry, problems related to work-related crime and counterfeit construction materials exist, but are not very much discussed [14-18]. In the case investigated in this study, both forging- and altering of invoices as well as money laundering was featured.

Jefferies et al. identified reputation as a critical success factor in winning project bids and that a trust-based owner-contractor relationship is a necessary contributor to successful projects [19]. Brønn and Ihlen argue that in order to understand reputation one must first understand the concepts of ‘identity’ and ‘image’ [20]. Identity is an internally oriented term describing the profile- and values communicated by an organization, and employees' views on this [20]. ‘Identity’ is, according to Kvåle and Wæraas, ideas and concepts that give an understanding of reality [21]. When a business communicate with its surroundings, they communicate their identity to stakeholders [20]. Therefore, understanding their identity enables businesses to gain insight into how they are perceived by others. This impression forms the basis for the business's image. Image is “the immediate impression the environment has of the organization” [20].

To understand what the stakeholders really think about a business, one must look at reputation. In this context Freeman describes stakeholders as “a group or an individual who can work on or influenced by organizational actions” [22]. There is a lack of consensus in the definition of the term reputation, various academic disciplines such as Psychology, Economics, Strategy, Accounting, Marketing, Communication, organizational theory and sociology all have their own understanding of the term [23-25]. All businesses establish an identity and an image, but their reputation is something that is archived and earned [20]. Despite the variance regarding the concept of reputation, most agree that reputation is something that is constructed over time and affected by all actions of the company [26]. The purpose of upholding a respectable reputation is important for a widespread range of reasons. Regardless, the relative essence is that a respectable reputation affects the strategic position of the business [24]. The impressions the businesses provide over time creates “reputational capital” that can strengthen the competitiveness of the business over time [20]. Reputation is often determined by external factors outside the business’ control. It is therefore both challenging and time consuming to build reputation while at the same time avoiding risks that can lead to a negative effect on the reputation [20, 27]. Charles points out that one must both build and maintain relationships in order to achieve positive reputation: “A reputation that is positive, lasting and robust requires huge investment in building and maintain good relationships with the organization's environment” [23].

The reputation of a business may be greatly affected by media coverage [28]. According to Waldahl and Bryant and Oliver, the media's impact has been a key research area for media science [29] [30]. Today, the media is viewed as a powerful force. The term ‘agenda’ is relevant to the importance of media reputation. The leading hypothesis about the media’s ‘agenda function’ states that a subject given intensive media coverage causes the topic to be prioritized and discussed [31, 32]. In addition, the ‘agenda’ function of the media demonstrate how media influences the perceptions associated with the given subject. The subject is thus often being linked and associated with the businesses involved [32, 33]). This paper uses the following definition of reputation; “reputation is the surrounding’s perception

of an organization over time” [20]. Thus, a good reputation is formed by a positive image over time. Furthermore, the perception of an organization changes for the better or the worse over time. Money laundering and altering of invoices are just some examples of activities that will alter it for the worse.

#### 4. Result and discussion

In order to study how two Norwegian major contractors managed to safeguard their reputation in the aftermath of the discovery of tax crime and money laundering within their projects, this paper investigates the following research questions:

- 1) What are the main challenges regarding work-related crime?
- 2) How do contractors manage their reputation in the aftermath of work-related crime?

In the Norwegian construction industry, the term “unserious actor” is widely used to describe companies acting criminal. This term gives associations towards non-professionals, but not necessarily criminal actors. This may imply that parts of the industry do not fully grasp or understand the severity of organized crime and money laundering. Consequently, the actors do not enact the problem truly and the construction industry does not fully comprehend that criminals infiltrate the construction industry. Thus, creating favourable market-conditions in order for criminals to get a better foothold in the legitimate part of the construction industry. As long as the construction industry does not take the problem seriously, the criminals will succeed with work-related crime. Another explanation for the term “unserious actors” relates to the challenge of identifying a company as criminal when not convicted. It can take years from an initial claim regarding criminal actions until a final verdict. This might be problematic for public clients that operate under the Public Procurement Act that prevents them from excluding companies not yet convicted.

The media attention initiated- and enhanced the climate for dialogue between industry, law-enforcers, and authorities. Still, communication between the law-enforcers and the industry was identified as a challenging area. Some interviewees specified the challenge associated with ongoing investigations and confidential information, “It is a challenge that the authorities know many things that we do not know”. Law-enforcers cannot inform the industry on their progress, which again leads the industry to believe that the police do not prioritise. Another major challenge is that the distribution of responsibilities is perceived to be unclear. It is a possibility that the contractors do not fulfil their supervisory duty accordingly; this is something the industry should improve. It is relatively evident that it exists a grey zone where criminal actors might strive within the industry’s supervisory duty. Only clear and tidy communication between the industry and the official agencies will remove this grey zone.

One of the biggest challenges regarding organised crime is to uncover the existence and extent of the matter. The task of uncovering whether a sub-contractor operates within the regulations of the law is perceived to be demanding. Furthermore, it is proven to be challenging to get contractors in the industry to understand the seriousness of organised crime. Some interviewees remarked that it is demanding to distinguish the criminals from the law-abiding, in both the procurement phase and the construction phase. An important challenge that can prevent crime is to work for increased motivation to perform the supervisory duty more accurately. According to the police, a major challenge for the main contractors is to discover whether an invoice is fictitious or not. The same goes for uncovering false or stolen identity papers. In order to address future challenges, the findings suggest that clients should not transfer the responsibility for revealing work-related crime to the contractor. If irregularities occur on a project, the client will have responsibility independent of whether the major contractor knew about it or not. The client has responsibility for everything that is going on their projects according to Norwegian legislation.

The media exposed that major contractors used criminal actors on their projects at the expense of reputable actors. Thus, the reputable actors were excluded from the market because they were not able to compete on price. The extensive coverage of the emerged case placed the problem on the agenda for the construction industry. The relatively massive coverage facilitated further discussions within the construction industry. Furthermore, several public agencies aired their opinions. This corresponds well with the hypothesis of McCombs that intensive media coverage leads to increased prioritising [31, 32]. The media did not just put the issue on the agenda; they made lasting changes by making the industry more receptive to the Police and the authorities. This confirms the hypothesis on media influence the perceptions associated with the topic [33].

When asked how the case affected the reputation of contractor A and B, both the contractor- and client representatives agreed that this potentially affected the reputation. Eleven of the interviewees, from all segments, emphasized that decent reputation is important for the business. A client stated that it would weaken the reputation of the contractor if the contractor were “exposed to criminal acts repeatedly during a relatively short time”. Furthermore,

the majority of the clients stated that it was critical for the contractor to distance themselves from the criminals and the criminal actions. Regardless, the contractor still had to take responsibility- and demonstrate their ability to correct the situation. The interviewees were asked how they responded when it came to their knowledge that criminal actors operate in the construction industry. One of the clients believed that this case was a huge setback for the whole industry's reputation. The emerging media attention affected how the entire construction industry appeared. The general view of the interviewees was that the most important measure for the construction industry actors in order to influence their reputation was to develop and educate their own employees, as they represent the company externally. Another aspect of good reputation was the ability to deliver good projects. A client representative stated that good reputation increases competitiveness over time. Furthermore, the interviewees considered reputation as a necessary ingredient in building an ethical and lawful culture.

Both the client and contractor representatives were asked about the importance of the media. The majority pointed out the media's importance when it comes to setting work-related crime in the construction industry on the agenda. The newspaper articles on work-related crime in the construction industry were regarded as vital for understanding the extent of the crime. Both clients and contractor representatives agreed upon this. The media consequently put work-related crime on the agenda. One representative stated the following, "I want to say that this is a good example of the media as an effective arena for setting the agenda". Furthermore, several interviewees emphasized that media put a focus on challenges not given sufficient attention within the construction industry. On the contrary, one client representative thought the media did not have enough knowledge about the conditions and the context of the industry in order to conduct such critical evaluations. Several interviewees emphasize that the media attention made contractors more responsive to both the police and authorities. Both the police and the authorities had previously tried to set the agenda on work-related crime, but only after the emerging of the actual case, the industry took it seriously. In this particular case, the two contractors involved had a decent opportunity to manage how the media perceived them due to their information advantage. An advantage they successfully utilized. Smaller companies involved had much less impact than the major contractors did.

When the clients were asked how the contractors worked in order to manage their reputation, several characteristics emerged. The most fundamental principle of building a good reputation was perceived to be the ability to deliver good projects. That is, the contractors deliver the right quality, following the schedule, at the agreed price. Furthermore, the clients emphasized that some deviations occur in all projects, often in form of contractual deviations. In this specific case, the subcontractors did not pay taxes and fees in accordance with the Norwegian Tax Payment Act. Thus, the interviewees emphasized the importance of handling such contractual deviation in a professional and open manner, especially vis-à-vis the client. An interviewee from one of the contractors stressed the importance of handling such deviations in a professional matter to ensure future contractual agreements with the same client. As an interviewee stated, "If you deliver a good project for the client, the quality is good, keeping price and progress as well as all that we agreed on, then the customer often returns". In connection with the scandal, both contractors A and B emerged as good examples for others in the industry through being open in the media and taking responsibility for the circumstances on their projects. They showed corporate responsibility beyond minimum requirements set in laws- and regulation. Both realized quickly that their control routines were insufficient and thus gave clear signals that they would have to improve their current practice. Through their openness, the contractors made the impression that they did not hide information and that they were not deliberately involved in criminal matters.

Both contractors expressed the need for redeeming themselves after the discovery of criminal activities on their construction sites. From the clients' perspective, it is important for contractors to deliver according to the contract and operate in accordance with laws and regulations. The consensus among clients was that the contractors' openness and willingness to rectify the situation helped the contractors and mitigated the potential demise of reputation. Several of the client representatives stated that the handling of both contractors A and B in the aftermath was upright. One client thought that the case did not affect the reputation of contractor B at all. Some of the clients pointed out that the contractors effectively- and in a proactive matter affected others' perception by being transparent and honest. Both contractor A and B acted with haste to denounce their affiliation with the criminal actors when the scandal emerged in the media. Both remained clear that they did not want to associate with criminal actors. By doing so, they gave their clients a robust indication that such actors were not to be allowed to enter their construction sites.

The media's impact on the reputation of a contractor can be massive when revealing crime in their projects. In such cases, the interviewed contractors pointed out the importance of being transparent and presenting all the known facts involving criminal subcontractors. Simultaneously, both contractor A and B emphasized that their main motivation to counteract the criminal actors was that such actors challenged their business values. One of the contractors mentioned

they felt a loss in prestige when media uncovered criminal actors on their construction site before they discovered it themselves.

Contractor A and B realized quickly that the criminals had to be excluded from the market. A major reason for the contractors to initiate such processes was due to the damage the scandal had on their reputation. Their immediate action is, in retrospect, viewed as an advantage. If they had hesitated, the industry might have changed their perception of them permanently to the worse. As seen in this case, being an already large and reputable contractor spawned yet another advantage as they had the resources to counteract. While the act of quickly distancing themselves from the case was a necessary act of damage control, it also poses one possible disadvantage. By quickly revealing their awareness, they also provided criminals a chance to alter their routines and adapt to the new market environment. Other contractors may learn from how contractor A and B handled the scandal and how they have worked for it not to happen again. The case study highlighted several countermeasures, summarized in table 2. The measures were implemented in order to safeguard the reputation of the contractors affected by the case.

*Table 2: Measures used to safeguard reputation in the aftermath of unwanted incidents*

| <b>Countermeasure</b>                   | <b>Description</b>  |
|---|---|
| Dissociate                              | Contractors dissociated themselves from the criminal activities by stating to both industry and media that such conduct was unacceptable on their construction projects, and that they worked vigorously on excluding such actors |
| Being a good example                    | Working on, preparing- and expanding their routines regarding prequalification of subcontractors, and pressed for more extensively use of prequalification system/ databases  |
| Taking responsibility                   | Showing willingness to rectify the situation and taking responsibility. The contractors settled the case through improving the situation by improving their own routines  |
| Continue to deliver good projects       | The contractors continued their work on deliver good projects according to contractual obligations.   |
| Professional management                 | Strong, transparent and open handling contributed to raise the contractors' reputation.   |
| Redefining own requirements and systems | In order to prequalify its subcontractors, both contractors expanded their criteria's beyond minimum requirements by the law.   |

When it comes to the reputation of the main contractors, one of the clients argued that the case did not affect the reputation in the end. The client representatives agreed upon that the contractors' open attitude and willingness to improve their procedures and culture led to an overall increased positive reputation for the contractors. The results show that the serious work conducted by contractor A and B in the aftermath of the scandal in order to counter criminal actors, strengthened their prospect to mitigate future incidents both during contracting- and execution of projects

## 5. Conclusion

The main challenge for contractors regarding work-related crime is that a decent reputation is important for the business. If a contractor experiences criminal actors repeatedly during a relatively short time, this weakens the reputation. A (seemingly) decent reputation is necessary when building an ethical and lawful culture and it is necessary for a contractor when competing in the market. The single most important measure for the contractors' reputation is to deliver projects according to agreed price and quality within schedule while following the contract as well as legal jurisdictions. The findings suggest that the contractors perceived their reputation not weakened by their involvement with criminal actors. However, they felt the pride was compromised. The contractors stated that the main motivation to work against the criminal actors was that they challenged core values. It is essential to handle crime-related challenges in an open way to maintain a good reputation towards the client. Several measures were identified to safeguard the reputation of the contractors against work-related crime. Among other things, the contractors need to develop and educate their own employees, as they represent the company externally. The contractors must take responsibility for the situation by removing criminal actors and condemn illegal actions when revealed. The consensus among the interviewees was that the handling in the aftermath raised the reputation of both contractor A and B. The use of supplier databases for pre-qualification of sub-contractors became an important measure that both contractors now use in their work against criminal actors. Both developed their pre-qualification routines, well beyond the sole

use of databases. This way, the contractors clearly stated their position and attitude in the industry. They take care of their reputation through an honest, open and professional approach.

Such an approach with clearly distancing themselves from the criminal actors, while still taking responsibility for correcting the situation, might work a couple of times. With the repeated infiltration of criminal actors during a relatively short time, the contractors have to do more than distancing themselves. They must actively prevent criminal actors from entering their projects. Furthermore, the fact that just some main contractors counteract criminal parties actively is not sufficient to solve the challenges of work-related crime in the construction industry. The rest of the construction industry and the relevant authorities also have to counteract work-related crime. Therefore, future research should focus on how contractors work to prevent work-related crime on the operational level.

## References

- [1] Yin, R.K., *Case study research: Design and methods*. 2013: SAGE Publications Inc. 312.
- [2] Ryen, A., *Det kvalitative intervjuet: fra vitenskapsteori til feltarbeid*. 2002: Fagbokforlaget.
- [3] Dalen, M., *Intervju som forskningsmetode. 2*. Utgave ed. 2011: Universitetsforlaget.
- [4] *LB-2015-15634*, in *Borgarting Court of Appeal*. 2016, Borgarting Court of Appeal. p. Borgarting Court of Appeal.
- [5] Charles, V. and S.C. Martin, *Professional ethics in the construction industry*. Engineering, Construction and Architectural Management, 2003. **10**(2): p. 117-127.
- [6] Lohne, J., et al., *Ethical behaviour in the design phase of AEC projects*. International Journal of Managing Projects in Business, 2017. **10**(2).
- [7] Engebø, A., et al. *Norwegian contractors' professional ethics and outward ethical credibility—the case of ethical framework*. in *9th Nordic Conference on Construction Economics and Organization 13-14 June, 2017 at Chalmers University of Technology, Göteborg, SWEDEN*. 2017.
- [8] Le, Y., et al., *Overview of Corruption Research in Construction*. Journal of Management in Engineering, 2014. **30**(4): p. 02514001.
- [9] Zou, P.X., *Strategies for minimizing corruption in the construction industry in China*. Journal of construction in Developing Countries, 2006. **11**(2): p. 15-29.
- [10] Jong, M.d., W.P. Henry, and N. Stansbury, *Eliminating Corruption in Our Engineering/Construction Industry*. Leadership and Management in Engineering, 2009. **9**(3): p. 105-111.
- [11] Bowen, P.A., P.J. Edwards, and K. Cattell, *Corruption in the South African construction industry: a thematic analysis of verbatim comments from survey participants*. Construction Management and Economics, 2012. **30**(10): p. 885-901.
- [12] Van Den Heuvel, G., *The Parliamentary Enquiry on Fraud in the Dutch Construction Industry Collusion as Concept Between Corruption and State-Corporate Crime*. Crime, Law and Social Change, 2005. **44**(2): p. 133-151.
- [13] Sohail, M. and S. Cavill, *Accountability to Prevent Corruption in Construction Projects*. Journal of Construction Engineering and Management, 2008. **134**(9): p. 729-738.
- [14] Engebø, A., et al., *Perceived Consequences of Counterfeit, Fraudulent and Sub-standard Construction Materials*. Procedia Engineering, 2017. **196**: p. 343-350.
- [15] Engebø, A., et al. *Counterfeit Materials in the Norwegian AEC-Industry*. in *24th Annual Conference of the International Group for Lean Construction*. 2016. Boston, USA.
- [16] Kjesbu, N.E., et al. *Counterfeit, Fraudulent and Sub-Standard Materials: The Case of Steel in Norway*. in *25th Annual Conference of the International Group for Lean Construction*. 2017. Heraklion, Greece.
- [17] Kjesbu, N.E., et al. *Countering counterfeit, fraudulent and sub-standard materials in construction*. in *Computer Sciences and Information Technologies (CSIT), 2017 12th International Scientific and Technical Conference on*. 2017. IEEE.
- [18] Skovly, M., et al., *Measures to counteract work-related crime – airport developments in Norway*. Procedia Computer Science, 2017. **121**: p. 664-671.
- [19] Jefferies, M., R. Gameson, and S. Rowlinson, *Critical success factors of the BOOT procurement system: reflections from the Stadium Australia case study*. Engineering, Construction and Architectural Management, 2002. **9**(4): p. 352-361.
- [20] Brønn, P.S. and Ø. Ihlen, *Åpen eller innadvendt. Omdømmebygging for organisasjoner*. 2009: Oslo: Gyldendal akademisk.
- [21] Kvåle, G. and A. Wæraas, *Organisasjon og identitet*. 2006: Det Norske Samlaget.
- [22] Freeman, R.E., *Strategic Management: A Stakeholder Approach (Pitman, Boston, MA)*. 1984.

- [23] Charles, F., *Reputation: realizing value from the corporate image*. Harvard Business School Press, Boston, MA., 1996.
- [24] Fombrun, C.J. and C.B. Van Riel, *Fame & fortune: How successful companies build winning reputations*. 2004: FT Press.
- [25] Van Riel, C.B. and C.J. Fombrun, *Essentials of corporate communication: Implementing practices for effective reputation management*. 2007: Routledge.
- [26] Balmer, J.M. and S.A. Greyser, *Revealing the corporation: perspectives on identity, image, reputation, corporate branding, and corporate-level marketing: an anthology*. 2003: Psychology Press.
- [27] Gotsi, M. and A.M. Wilson, *Corporate reputation: seeking a definition*. Corporate communications: An international journal, 2001. **6**(1): p. 24-30.
- [28] Bromley, D.B., *Psychological aspects of corporate identity, image and reputation*. Corporate Reputation Review, 2000. **3**(3): p. 240-252.
- [29] Waldahl, R., *Mediepåvirkning*. 2 ed. 1999: Ad Notam Gyldendal.
- [30] Bryant, J. and M.B. Oliver, *Media effects: Advances in theory and research*. 2009: Routledge.
- [31] McCombs, M.E. and D.L. Shaw, *The agenda-setting function of mass media*. Public opinion quarterly, 1972. **36**(2): p. 176-187.
- [32] McCombs, M., *Setting the Agenda: The mass media and public agenda*. Malden, MA: Blackwell, 2004.
- [33] Carroll, C.E. and M. McCombs, *Agenda-setting effects of business news on the public's images and opinions about major corporations*. Corporate reputation review, 2003. **6**(1): p. 36-46.