TECHNOLOGY AS PERCEIVED BENEFIT OR BURDEN IN THE FIGHT AGAINST CORRUPTION AT INTERNATIONAL SMEs'? THE ROLE OF TRUST AND REDUCED HUMAN INTERACTION

Emily Luisa Bauer,
University of Zurich, Switzerland,
emily.bauer@uzh.ch

Stefan Schembera,
Radboud University, Netherlands
s.schembera@fm.ru.nl

Article info

Abstract

In light of the disclosed organisational corruption scandals over the last decades, firms have been increasingly adopting information and communication technologies (ICTs) to fight corruption. Scholars and practitioners alike have particularly highlighted the potential benefits of such anti-corruption-related ICTs for internationally operating small and medium-sized enterprises (SMEs): On the one hand, such ICTs could cure SME's lack of knowledge on the business practices in geographically and institutionally distant markets. On the other hand, they could compensate for SMEs' scarce resources and limited bargaining-power to reject a corrupt offer. Building on interview and documentary data, the aim of this case study is not only to explore whether such opportunities are indeed experienced by SMEs, but also what risks and challenges may arise from using ICTs in the fight against corruption in foreign business. We find that involved actors indeed arrive at more contradictory conclusions regarding the usefulness of ICTs: While some actors regard the prevention of improprieties as a key benefit resulting from an increasingly transparent digital business environment, others perceive potential cyber-crime as a central risk when using ICTs. Crucially, though, we find that the degree of trust and the perceived lack of human interaction between the SME and its stakeholders play a central role in explaining whether benefits or risks prevail in the SMEs' perception of the usefulness of anti-corruption ICTs.

1. Introduction

Globalisation and digitalisation have enabled firms of all sizes to enter and operate in international markets and foreign countries. While this has opened up many doors for small and medium-sized enterprises (SMEs), it has also exposed them to considerable dangers. Their lack of resources and low bargaining-power make them especially susceptible when facing a corrupt business offer (Hauser and Kronthaler, 2014). The process of globalisation has multiplied the risks of corruption given that firms now increasingly operate in countries with high levels of perceived corruption (Schembera and Scherer, 2017). While the focus in the anti-corruption literature and in practitioner discourses has been on larger firms, the results of a global World Bank survey suggest that the likelihood of being confronted with corruption is higher for smaller firms (Schiffer and Weder, 2001). Furthermore, SMEs make up half of the economic value creation worldwide (Wymenga et al., 2011). Identifying appropriate means to help SMEs, especially those operating internationally, tackling corruption risks effectively seems crucial.

Digitalisation has led enterprises to adopt technological innovations, so-called information and communication technologies (ICTs), to counter corruption and to develop transparency and openness (Bertot et al., 2010). Technology has, for example, enabled them to digitalise and thus better monitor business transactions and activities. This "data revolution" entails large amounts of data being made accessible for auditing and identifying corrupt behaviour by professionals and the public (Heimann and Mbiyavanga, 2018, p. 250). Technology has also allowed the public to better access financial and sustainability reports of organisations. However, critical voices arise highlighting potential risks resulting from such an increase of transparency in business transactions: For example, the availability of the massive amount of data provided through ICTs can also be used for corrupt purposes (Heimann and Mbiyavanga, 2018). As more and more knowledge about ICT-related dangers and unintended side-effects becomes available, a closer scrutiny of their actual usefulness seems urgently needed.

Although the effort to reduce corruption has attracted increasing scholarly attention, little research has been conducted on the influence of ICTs in the fight against corruption. The few existing studies on this topic have focused on the public sector, for instance, on government-initiated ICTs such as e-governance or open data portals (e.g. Bertot et al., 2010; Davies and Fumega, 2014; Hlatshwayo et al., 2018). In contrast, only few studies have been conducted on digital anti-corruption practices and initiatives at the firm level. What is more, while much of anti-corruption research has focussed on multinational enterprises (MNEs) and their efforts in this context (Branco and Delgado, 2012; Rodriguez et al., 2006; Weyzig, 2009), little re-

search has been undertaken on anti-corruption ICTs at international SMEs.

This research paper aims to provide a better understanding of the perceived opportunities and risks of using ICTs at international SMEs in their fight against corruption. This paper therefore aims at answering the following question:

What are the perceived opportunities and risks of using ICTs in the fight against corruption at international SMEs?

We use a primarily inductive qualitative research design to answer our research question (Gioia et al., 2013). That said, a thorough literature review was performed before starting the actual empirical analysis in order to identify central characteristics of international SMEs. Our data consists of five interviews with members of international SMEs based in Switzerland and Germany, one follow-up correspondence with one of the interview partners, as well as of 165 pages of corporate documentary data.

In the following, we present the literature on corruption, SMEs and ICTs to form a first theoretical grounding. Next, we outline the qualitative research process, data base and analytical approach. We go on to present the findings that emerged from the analysed data. Finally, we discuss our findings against existing academic and practical knowledge, including the limitations of our study as well as opportunities for further research.

2. Theoretical Background

Organisational corruption

Corruption is commonly defined as *the misuse of public power for private gain* (Aguilera and Vadera, 2008, p. 433; Habib and Zurawicki, 2002; Robertson and Watson, 2004; Rodriguez et al., 2005; Theobald, 1990). However, this definition has been criticised for not including actors in the private sector. In the wake of globalisation of business in the 1980s and 1990s, as companies have expanded to international markets, and in light of disclosed corporate corruption scandals, researchers have acknowledged the scale of corruption at an organisational level and the need to understand it better. In that respect, the generally used definition of corruption has been adapted to *the misuse of authority for private gain*, where *public power* has been replaced by the word *authority* to include corruption that involves private parties such as organisations or individuals in organisations (Aguilera and Vadera, 2008, p. 433; Ashforth and Anand, 2003; Branco and Delgado, 2012; Gans-Morse et al., 2018; Rodriguez et al., 2006). Social and economic literature suggests that corrupt acts are the result of negotiation processes, usually involving two parties. In such a negotiation process, either a due monetary or non-monetary advantage is offered, agreed upon or granted

in exchange for undue influence over a decision at the discretion of the beneficiary. Alternatively, a decision-maker demands an undue monetary or non-monetary advantage and threatens to make a decision to the detriment of the other party if they should not comply (Hauser and Kronthaler, 2014). For the purpose of this paper, we will focus on corruption including at least one private party, be it in interaction with the public sector, such as public officials, or "private-private" corruption, where both parties involved are private actors (Argandoña, 2003).

Challenges of international smes in fighting corruption

While corruption is a barrier for any kind of organisation, large or small, local or global, in the business or governmental environment, it hinders especially small and medium-sized firms in their international development. A study by Schiffer and Weder (2001) has shown that the smaller an enterprise is, the more likely it is to be confronted with corruption-related problems and perceive corruption as a business obstacle. Larger firms or firms with fewer competitors regard corruption as less of an issue and pay bribes less often (Bennedsen et al., 2009). Compared to employees working in larger companies, international SME employees are more likely to believe corruption to be part of the modus operandi and more common in their specific country. There is a particularly high risk of corruption for internationally operating SMEs (Becker et al., 2012). Why international SMEs are more susceptible to corrupt actions compared to larger companies can be explained by their specific characteristics, which will be discussed in the following section.

A lack of resources can cause a threat to SMEs when facing corruption. For instance, it can be caused by insufficient knowledge of foreign markets. Internationally active SMEs operate in different regions with different business practices and customs from their own. When engaging with actors from foreign markets, SMEs can have inadequate information about the country-specific business practices, for example concerning the handling of unofficial payments. This also makes it difficult to distinguish between legal and illegal dealings, as there are many grey areas. A larger company usually has a market development expert or team instructed to inform and familiarise itself and the company with a country's specific procedures and culture, whereas an SME with few human resources and little know-how of foreign countries and markets is more challenged in that regard (Amal and Filho, 2010; Hauser and Kronthaler, 2014). SMEs with little capital and smaller profit margins tend not to have the capacity to refuse corrupt offers because the consequences of refusing could cause them to go out of business (UNIDO and UNODC, 2012). SMEs are strongly dependent on networks to ensure their survival in the international market. By being

part of stakeholder networks they gain access to additional resources and information while also sharing their resources among other stakeholders. Stakeholder networks can help SMEs overcome their resource limitations, strengthen their strategic position and enhance their legitimacy (Amal and Filho, 2010; Ellis, 2011; Loane and Bell, 2006; Nyuur et al., 2018). Their dependency on stakeholder networks can also be a liability for SMEs when facing corruption. For example, delays in a cost-intensive foreign engagement, for instance if a supplier cannot deliver products in time, can have serious financial consequences for SMEs because they cannot offset temporary losses in one division against surpluses in other divisions, and the risk of insolvency can become critical very quickly. Therefore, SMEs have limited financial and temporal endurance, especially in the context of avoiding corrupt behaviour, because they are more economically dependent (Hauser and Kronthaler, 2014). Most aspects of coordination, such as communication and work processes, and the organisational culture, such as interpersonal and power relationships, within SMEs are often informal, while larger firms' structures tend to be formalised and hierarchical (Murillo and Lozano, 2006; Wickert, 2016). The ethical behaviour of SME employees is based on their own moral beliefs, principles and values rather than guided by formal rules. This informality manifests itself in less rigid documentation, control systems and processes (Jenkins, 2006; Spence, 2007; Spence and Lozano, 2000; Wickert, 2016). The informal structures in SMEs and personal relationships between SME employees can be a reason for a corruption-tolerant organisational culture (UNIDO and UNODC, 2012). The lack of formalised documentation and processes can be an enabler of corruption, be it within the organisation or involving external parties, as corrupt practices cannot be exposed as easily. Another reason for SMEs to engage in corruption is to avoid government regulations, which can be a growth barrier for smaller firms (Aterido et al., 2011). "The more activities public officials control or regulate, the more opportunities exist for corruption" (USAID, 1999, p. 13, cited by Bertot et al., 2012, p. 265). Adhering to regulations can be a challenge for SMEs, as human and capital resources are needed to deal with the formal and complex administration and to build up an extensive compliance system. The financial costs needed to comply with regulations are often not proportional to company size, which puts SMEs at a disadvantage and makes evading regulations through corruption seem advantageous (Djankov et al., 2004). Research has shown that firm size as well as other factors have a positive influence on the bargaining power of a company (Grunert and Norden, 2012; Hauser and Kronthaler, 2014; Lepoutre and Heene, 2006). Due to the SMEs' low power in bargaining and influencing higher-level or political decisions, they may often perceive no other options than to accept a corrupt business offer (Hauser and Kronthaler, 2014; UNIDO and UNODC, 2012).

In sum, one may conclude that SMEs are even more likely than their larger counterparts to engage in corrupt behaviour when operating abroad, be it by choice or perceived obligation to ensure the firm's survival. Corruption can hence constitute a substantial barrier in the internationalisation of SMEs. It is therefore not only important for SMEs to be able to protect themselves against and to prevent corruption, but also to meet stakeholder expectations of being fair and transparent market actors. In order to achieve these goals, firms increasingly adopt digital tools and anti-corruption measures.

Anti-corruption ICTs

The Internet is one of the most revolutionary technological inventions of our time, and the basis of many ICTs. It may help specifically to increase transparency by making it possible to collect, distribute and access information at an extremely low cost (Bertot et al., 2010). As outlined above, SMEs seem particularly dependent on 'low-cost' solutions in the fight against corruption. Specifically, ICTs are a new approach for organisations to heighten their anti-corruption efforts and, more broadly, to achieve transparency. They are defined to "include relevant technologies, products and services as well as IT-related economic activity" (Smith, 2001, cited by Shim and Eom, 2009, p. 105). Anti-corruption ICTs find more and more use in organisations, and are analysed valuable and efficient tools to improve transparency, accountability and reduce corruption (Davies and Fumega, 2014). Scholars have suggested that corruption can be reduced through ICTs by endorsing good business governance and tracing, monitoring and controlling of business activities and by minimising opportunities for corrupt practices (Bertot et al., 2010; Shim and Eom, 2008). Threats to the use of anti-corruption ICTs are the sheer mass and reach of the accumulated data accessible through the Internet. They have heightened the possibilities of cyber-crime (Heimann and Mbiyavanga, 2018).

Often, when firms implement anti-corruption ICTs, the purpose is not solely to fight corruption, but also to improve management efficiency and services. The reduction in corruption opportunities and consequently less corruption cases in business environments is then often a welcome benefit of improved digitalised processes rather than an intended goal. This can be explained by the fact that according to some indicators including the Transparency International Corruption Perception Index (TI, 2018), corruption is perceived to be less common in developed countries compared to developing countries. Consequently, using ICTs to fight corruption may seem particularly relevant for SMEs from developed countries with operations in developing countries (Bhatnagar, 2003; Davies and Fumega, 2014; Mahmood, 2004). Commonly used anti-corruption ICTs are digitally published corporate reports such as financial and sustainability reports, codes of conduct,

anti-corruption initiatives and external reporting mechanisms (Branco and Delgado, 2012; Davies and Fumega, 2014; Gordon and Miyake, 2001; Mahmood, 2004; UNIDO and UNODC, 2012). A code of conduct, for example, can generate trust of an internal or external stakeholder towards the disclosing firm, which can be a business advantage. Trusted firms acquire contracts and clients, which in turn results in higher profitability. It can also have a positive effect on firms' public image, which can increase the likelihood of political and regulatory support (UNIDO and UNODC, 2012).

3. Methods

To answer the research question, we conduct a qualitative study on ICTs in the fight against corruption at international SMEs based on interview and documentary data (Corbin and Strauss, 2014). In particular, we conducted five semi-standardised interviews with corporate decision-makers to be able to acquire comprehensive knowledge on the topic of our study by exploring the individual perceptions of our interviewees (Hopf, 2017). In addition, we were able to engage in a follow-up correspondence with one interview partner to gain further insights into the most relevant cues from the initial data collection and analysis round. Finally, we considered company documents to complement individual perceptions with organisational-level statements.

Sampling approach

We chose international SMEs that differed on their general commitment toward sustainability and corporate social responsibility (CSR) assuming that sustainability-committed firms are more likely to be active in the fight against corruption compared to firms without any such commitment. A search for more CSR-committed firms was carried out by filtering companies according to their publishing of sustainability reports and experience of corruption and corruption reporting. Additionally, international SMEs that are members of the UNGC were of interest. The GRI's Sustainability Disclosure Database and the UNGC website were used for this search. The search was filtered for firms based in Switzerland and Germany, as both countries tend to be at similarly low levels of corruption risks (TI, 2018). The first author further filtered the search by scanning the firms' websites for codes of conduct, as well as for reports and brochures on SMEs' anti-corruption effort and organisational integration of digitalisation. Table 1 provides an overview of the conducted interviews including a description of the represented organisations and a brief explanation as to why they were asked for an interview.

Tab. 1: Overview of interview data

Abbreviation	Firm type	Function	Purpose	Interview date and type
IA	Professional services company	Managing Director	His knowledge on the firm's internal processes and its sustainability and digital orientation seemed relevant.	15 May 2019 (by phone)
IB	Bank	Head of Sustainability	Her position promised deep practical insight into the sustain-ability-conscious and transparent firm.	22 May 2019 (by phone)
IC	Food and beverage company	Business Development and International Clients	Interviewing an expert on inter-national business seemed relevant for this thesis as it promised practical insight into the opportunities and risks of a small firm in foreign markets.	17 May 2019 (by phone)
ID	Industry association	Chief Executive Officer (CEO)	His position sug-gested a deep understanding of the international development of SMEs.	24 May 2019 (in person)
IE	Bank	Director Innovation Management	He is a digitalisa-tion expert whose knowledge of digital risks, for example, seemed relevant.	10 May 2019 (by phone)

Our interview sample is comprised of organisational representatives and experts at different organisational levels in order to gain varied practical insights. In line with the recommendation of Meuser and Nagel (1989), the majority of respondents are middle management employees as they tend to not only be involved in decision-making, but also know internal processes and events better than the highest level.

To obtain information from as many different SMEs as possible, given the resources available to us, we chose to interview one informant per organisation. We developed an interview guide for each interviewee based on previous background analyses of the interviewee and the represented

organisation, as well as on cues deemed as potentially relevant along the research process (see Appendix).

Case context

Interviewee A is the Managing Director at a professional services firm. His task for the last two years has been to integrate digital processes and products into the firm. His knowledge on the firm's internal processes and its sustainability and digital orientation were reasons why he was contacted for an interview. The firm is an internationally active SME that produces hygiene products and silicates based in Switzerland. It employs around 120 people and reports an annual turnover of around 30 million CHF. It owns international subsidiaries in Taiwan, Singapore, Czech Republic, Germany, France and is a part of a joint venture in Slovakia. It sells to over 50 countries across Europe, America and Asia. The firm does not possess a code of conduct or has not published a corporate report since 2016.

Interviewee B is the Head of Sustainability at a Swiss bank. She was asked for an interview because her position promised deep practical insight into the sustainability-conscious and transparent firm. The firm provides ethical banking services, employs 120 people and reports an annual turnover of around 2 million CHF. Although the bank is not active internationally, they were requested for an interview as they are known to publish highly transparent business and sustainability reports, including lists of loans granted. The SME has a code of conduct. Interviewee C is responsible for Business Development and International Clients at a food and beverage company. He focusses on the export to and business development in the Middle East, Asia, Italy and kosher markets. The firm was requested for an interview because it is an internationally active and sustainability-aware SME. Interviewing an expert on international business seemed relevant for this study as it promised practical insight into the opportunities and risks of a small firm in foreign markets. We were able to conduct a second correspondence with him in order to follow up on relevant aspects he had mentioned in the first interview. We focussed the questions on his perception of the role of trust and the lack of human interaction when using anti-corruption ICTs for international SMEs. The SME is a traditional family business based in Switzerland that produces chocolate goods. They have a total of 200 employees and an annual turnover of 60 million CHF. A quarter of its production is distributed internationally. The firm does not publish corporate reports or a code of conduct. Interviewee D is the CEO of an investment promotion firm. He was requested for an interview because his position suggests a deep understanding of the international development of SMEs. The firm is an internationally active SME based in Switzerland. It focusses on economic development, export and location promotion on

behalf of the Swiss government and supports SMEs in their internationalisation process. They have around 100 employees and an annual turnover of 11 million CHF. The firm uses a code of conduct. As part of their SME development services they suggest adopting and offer company- and industry-specific codes of conduct to clients.

Interviewee E is the Director of Innovation Management at a bank headquartered in Germany. He specialises in digital innovation topics such as new business models, services and products. He was requested for an interview because he is a digitalisation expert whose knowledge of digital risks, for example, seemed relevant. The firm offers digital financing solutions in the real-estate industry, has a total of 2788 employees and its annual turnover generally exceeds 1 billion Euros. They operate in more than 20 countries on three continents. They are a member of the UNGC, regularly publish sustainability reports and possess a code of conduct.

According to the European Commission, a company with 250 or fewer employees and either an annual turnover of 50 million euros or less, or a balance sheet total not exceeding 43 million euros is defined as an SME (European Commission, 2019). A few of the interviewed firms exceed the technical SME criteria. Interviewee C's firm generates an annual turnover by 6 million euros over the limit set by the European Commission, and Interviewee E's firm's employee count and annual turnover exceed the limit considerably. However, we justify our classification of these firms by the fact that the interviewees themselves consider their firms as SMEs. For Interviewee E's firm, this may be the case because the bank is surrounded by competing banks that are much larger in size.
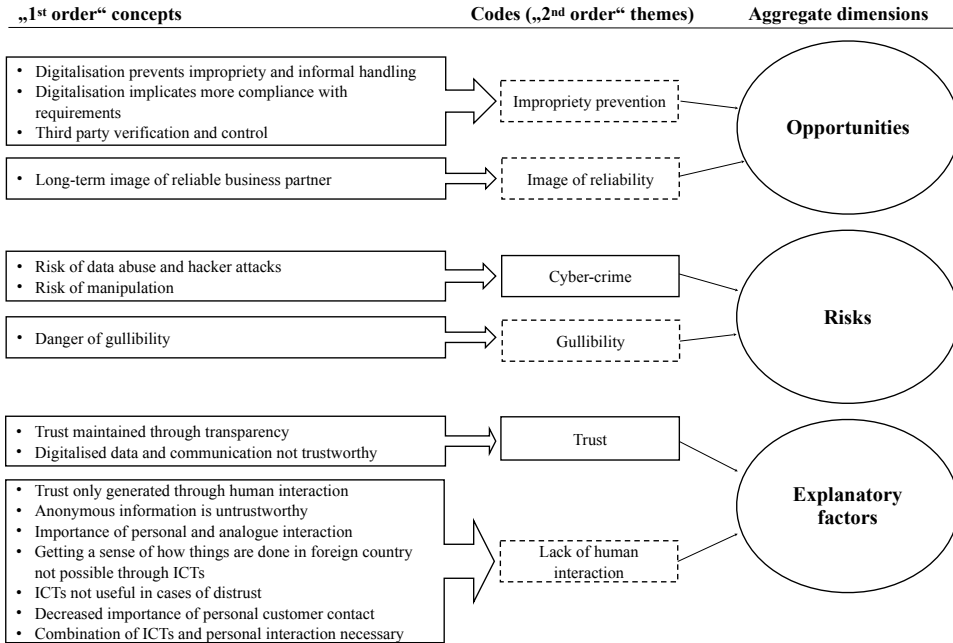
Data collection

Interviews. At the beginning of the interview, we gave a brief introduction into the research topic. We chose, however, not to specifically and directly frame our research topic because of the sensitivity of the issue of corruption. Instead, we presented our research topic as the influence of digitalisation, specifically ICTs and transparency, on sustainable stakeholder interaction at international SMEs. The interview questions were based on the content of the two thematic blocks from the guide, such as the firms' opportunities and risks in an international market, their most important stakeholders, the firms' internal and sustainability practices and the influence of digitalisation on those practices (see Appendix). After the interview, the first author transcribed the recordings of the conversations (see Table 2 for exemplary evidence from the interview data). The respective abbreviations from Table 1 have been used to title the interviewees. As an example, statements by Interviewee A have been marked "IA". The quotations shown in the findings refer to the respective interview and quote and

are indicated as follows: (Abbreviation, quote number). *Documentary data*. In addition to the interview data, we collected a total of eight public and corporate documents published between 2013 and 2019, amounting to 165 pages. We initially focussed on documents referred to by the interviews, and included further documents that appeared relevant in these contexts (Kalina et al., 2003).

Data analysis

In order to analyse the data generated from the expert interviews, we used the methodology by Gioia et al. (2013), also known as the Gioia Methodology. The Gioia Methodology is a systematic approach to conducting inductive research, and guiding and presenting its analysis. It is designed to ensure that organisational dynamics are understood by "capturing concepts relevant to the human organisational experience in terms that are adequate at the level of meaning of the people living that experience *and* adequate at the level of scientific theorizing about that experience" (Gioia et al., 2013, p. 16). This approach presents a "1st order" analysis of "informant-centric terms and codes" and a "2nd order" analysis such as "researcher-centric concepts themes and dimensions" (Gioia et al., 2013, p.18). Coding the interview and documentary data with the software Atlas.ti, the first author created "1st order" concepts by relying closely on the informant's expressions, and regularly discussed with the second author the potential relevance of the identified concepts, as well as their similarities and differences. Based on such discussions, the first author grouped similar and potentially relevant "1st order" concepts into "2nd order" themes, labelled "codes" in our study. We initially focussed our analysis primarily on the perceived opportunities and risks of ICTs for international SMEs in the fight against corruption. For example, we treated emerging concepts such as trust, impropriety prevention, lack of human interaction and cyber-crime as such opportunities or risks. Furthermore, whenever we realised that our story became too complex, we decided to eliminate codes, e.g., those distinguishing between different "affordances" related to ICTs. This iterative process was performed multiple times. Only in a later stage of our analysis, we came to realise that trust and the lack of human interaction actually play an explanatory role in why SMEs perceive the use of ICTs more as an opportunity or a risk, rather than constituting an opportunity or risk themselves. Once a certain maturity became evident regarding the nature, amount and labelling of the 2nd order themes, we jointly discussed how to further integrate them into a smaller set of – ultimately three – "aggregate dimensions". The final data structure (see Figure 1) emerging from this process "provides a graphic representation of how we progressed from raw data to terms and themes in conducting the analyses" (Gioia et al., 2013, p. 20).

Fig. 1: Data structure

„1st order" concepts	Codes („2nd order" themes)	Aggregate dimensions

- Digitalisation prevents impropriety and informal handling
- Digitalisation implicates more compliance with requirements
- Third party verification and control

→ *Impropriety prevention*

- Long-term image of reliable business partner

→ *Image of reliability*

→ **Opportunities**

- Risk of data abuse and hacker attacks
- Risk of manipulation

→ Cyber-crime

- Danger of gullibility

→ *Gullibility*

→ **Risks**

- Trust maintained through transparency
- Digitalised data and communication not trustworthy

→ Trust

- Trust only generated through human interaction
- Anonymous information is untrustworthy
- Importance of personal and analogue interaction
- Getting a sense of how things are done in foreign country not possible through ICTs
- ICTs not useful in cases of distrust
- Decreased importance of personal customer contact
- Combination of ICTs and personal interaction necessary

→ *Lack of human interaction*

→ **Explanatory factors**

The inductive codes are distinguished from the deductive codes by means of dashed lined boxes. Once the data structure has been built, we finalised the analysis by creating a theoretical model to show the dynamic interrelationships between the generated codes and aggregate dimensions (Gioia et al., 2013). The theoretical model (see Figure 2) shows how the explanatory factors trust and lack of human interaction are embedded in this dynamic.

4. Findings

To answer our research question as to why SMEs perceive ICTs more as opportunities or risks in the fight against corruption, we first outline the identified opportunities and risks, and then elaborate on the role of trust and the lack of human interaction as the two central explanatory factors in the relation between SMEs' use of ICTs and perceived opportunities vs risks. The results are presented as "1st order" concepts that rely on representative excerpts from interview and documentary data (see Table 2). Unless otherwise noted, a code is generated deductively.

Tab. 2: Exemplary evidence from interview data

Code	"1st order" concept	Quote
Impropriety prevention	Digitalisation prevents impropriety and informal handling	"Digitalisation brings a lot of transparency into processes and prevents improprieties and informal handling." (ID, 1)
	Digitalisation implies more compliance with requirements	"Digitalisation creates more transparency, more requirements that must be met." (ID, 2)
	Third party verification and control	"Third party verification and control [are opportunities that arise for SMEs when using ICTs in their fight against corruption when there is no trust in the business relationship]." (IC, 1)
Image of reliability	Long-term image of reliable business partner	"[…] but at least after two or three years, word gets around that you're clean and reliable, and then you get a completely different clientele. Then you'll be approached by those who are looking for reliability, thoroughness and honesty." (ID, 3)
Cyber-crime	Risk of data abuse and hacker attacks	"A month ago my CFO came to my office and said, "Ah, you're here. Look, I've just received an email from you". The email said: "Dear Anja, please transfer 64,000 francs immediately to this account and I will give you the necessary forms this afternoon. But this is urgent. I'm not in the building right now." And it was signed by me. Digitalisation can also bring dangers. The processes must then of course be done right. Someone suddenly has access to my email and gives out such an order from my email account to my CFO. I know companies where such orders were followed, where people don't check such processes internally. With us, you can't give out a cent if the necessary forms aren't available, and not even if the CEO says: "I'll give them to you in the afternoon. Do it now. It's urgent."" (ID, 4)
	Risk of manipulation	"But formal organisational processes and controls can create a false sense of security. Formal organisational processes can be anticipated by frauds, so controls can lose their effectiveness." (IC, 2)
Gullibility	Danger of gullibility	"ICTs can lead to gullibility when even false information is communicated professionally." (IC, 3)
Trust	Trust maintained through transparency	"That is transparency, but at the same time a high degree of trust is placed in us. They want us to be transparent, but at the same time they trust us to do things right. There is no mistrust about what we stand for and who we are." (IB, 1)
	Digitalised data and communication not trustworthy	"Trust in digital anonymous information does not exist." (IC, 4)

Lack of human interaction	Trust only generated through human interaction	"Digitalisation is just anonymity. When you are anonymous, there is a lot you can do and a lot you can hide. But when you have been in personal contact with each other and have worked together for a long time, it is like a relationship. Even a marriage is not digital, it is based on trust. Trust is only possible through human relationships." (IC, 5)
	Anonymous information is untrustworthy	"Trust in digital anonymous information does not exist." (IC, 4)
	Importance of personal and analogue interaction	"Analogue and really talking to each other and not only exchanging data." (IC, 6)
	Getting a sense of how things are done in foreign country not possible through ICTs	"I cannot get a sense for how a customer dialogue is held in a foreign country through Skype or other digital media." (IA, 1)
	ICTs not useful in cases of distrust	"Whether internationally or nationally, if, for example, you don't trust your sales department and don't trust the feeling of the sales department, then you cannot achieve anything with digital tools." (IA, 2)
	Decreased importance of personal customer contact	"The more these platform topics or general digital topics and digital competitors enter the market, the less important personal customer contact becomes in this segment as well." (IE, 1)
	Combination of ICTs and personal interaction necessary	"Exactly, the combination is important. In my opinion all these network issues need to be dealt with in an analogue manner for years to come. But the administration simply has to be done digitally, so that that work can be taken off these people's hands, who are supposed to maintain personal networks and need the time to do so." (IA, 3)

Perceived opportunities of using ICTs in the Fight against Corruption at SMEs

The interviewees mentioned two main opportunities that can arise from the use of anti-corruption ICTs that are relevant for SMEs: First, the prevention of improper transactions and dealings and, second, the creation of an image of reliability. These codes emerged inductively from the analysed data.

Impropriety prevention

Digitalisation prevents impropriety and informal handling. Interviewee D explained that the motivation for actors to conduct improper and informal actions is mitigated because disclosed data may uncover improprieties.

> *"Digitalisation brings a lot of transparency into processes and prevents improprieties and informal handling."* (ID, 1)

Digitalisation implicates more compliance with requirements. Interviewee D also stresses that increased digitalisation not only creates transparency, but also implies more requirements to be complied with.

> *"Digitalisation creates more transparency, more requirements that must be met."* (ID, 2)

Third party verification and control. For Interviewee C, the opportunity to verify and control third party transactions and processes is relevant when using ICTs to fight corruption.

> *"Third party verification and control [are opportunities that arise for SMEs when using ICTs in their fight against corruption when there is no trust in the business relationship]."* (IC, 1)

Image of reliability

Long-term image of reliable business partner. Interviewee D explains how the firm he works for, as part of its consultancy services, recommends SMEs to adopt a code of conduct to sustainably achieve an image of trustworthiness and signal corruption intolerance.

> *"We tell our customers, when they go to Indonesia - Indonesia is a highly corrupt country, still — that that's just the code of conduct, which is part of the contract terms - "We don't advise you to get involved in something like this and "join in the corruption" because it's not sustainable". The companies, specifically in Indonesia - I know a lot, I'm often there - who are not playing along, all say: "It's hard at the beginning. You lose jobs or you don't get jobs that you would have gotten if you paid a little bit of money, but at least after two or three years, word gets around that you're clean and reliable, and then you get a completely different clientele. Then you'll be approached by those who are looking for reliability, thoroughness and honesty." They all say that it's worth it. It's a little harder at first, but it's worth it."* (ID, 3)

Perceived risks of using ICTs in the fight against corruption at SMEs

Central risks that arise when SMEs use ICTs to fight corruption emerged from the literature review and the conducted interviews. Cyber-crime, such as hacker attacks and data manipulation, may make anti-corruption ICT ineffective. The danger of stakeholders being gullible when faced with seemingly professional digitalised information was also mentioned repeatedly.

Cyber-crime

Risk of data abuse and hacker attacks. A particular challenge for SMEs using ICTs to fight corruption is related to risks of data security. For example, Interviewee D explained how publishing information and data could enhance the risk of hacker attacks. He illustrated an example of how his email account was hacked and a specific employee of his firm was contacted and ordered to transfer money immediately. He explained how SMEs could be especially

susceptible to such hacker attacks because they may lack formalised processes such as filling out necessary forms in order to execute money transfers.

> *"A month ago, my CFO came to my office and said, "Ah, you're here. Look, I've just received an email from you". The email said: "Dear Anja, please transfer 64,000 francs immediately to this account and I will give you the necessary forms this afternoon. But this is urgent. I'm not in the building right now." And it was signed by me. Digitalisation can also bring dangers. The processes must then of course be done right. Someone suddenly has access to my email and gives out such an order from my email account to my CFO. I know companies where such orders were followed, where people don't check such processes internally. With us, you can't give out a cent if the necessary forms aren't available, and not even if the CEO says: "I'll give them to you in the afternoon. Do it now. It's urgent.""* (ID, 4)

Risk of manipulation. Interviewee C suggests that ICTs, for example digitalised formal processes, may be manipulated and thus not be effective.

> *"But formal organisational processes and controls can create a false sense of security. Formal organisational processes can be anticipated by frauds, so controls can lose their effectiveness."* (IC, 2)

Gullibility

This code was generated inductively from the analysed interview data.
Danger of gullibility. According to Interviewee C, the professional nature of digitally communicated information may make the information appear more believable, which could make stakeholders more gullible towards it.

> *"ICTs can lead to gullibility when even false information is communicated professionally."* (IC, 3)

The role of trust in using ICTs in the Fight against Corruption at SMEs

Trust was frequently mentioned as an important factor for SMEs when using anti-corruption ICTs. While some of the conducted interviews show that firms' use of ICTs and transparency maintain the trust that is placed towards them, others suggest that digitally communicated information is not trustworthy.

Trust maintained through transparency. Interviewee B explained that because their firm's core values relied on sustainability and ethics, and transparency was a key strategy of the firm, their stakeholders trusted the firm. Their disclosure of business activities through publishing reports further built up their stakeholders' trust in them.

> *"That is transparency, but at the same time a high degree of trust is placed in us. They want us to be transparent, but at the same time they trust us to do things*

right. There is no mistrust about what we stand for and who we are." (IB, 1)

In their codes of conduct, the bank and the industry association at which Interviewee E and Interviewee D are employed respectively explained that maintaining and building stakeholders' trust in them was one of the main reasons for publishing codes of conduct.

> "*The fight against corruption, bribery and corruptibility in all its forms is of particular importance due to the complex challenges in our international business. [...] The opportunities arising from sound risk and compliance management in the fight against corruption and bribery lie in building and maintaining the trust of our shareholders, customers and business partners, supervisory authorities and other stakeholders in society. It thus serves to promote long-term customer loyalty and the continuous economic growth of the company.*" (IE, nonfinancial report)
> "*We have summarised our values and basic beliefs in this code of conduct with the intention of maintaining and further expanding this trust.*" (IE, code of conduct)

Digitalised data and communication not trustworthy. Interviewee C, on the other hand, maintained that trust could not be generated through the use of ICTs as digitalised communicated data was not trustworthy. According to him, his firm relied on analogue communication channels or face-to-face communication when interacting with other stakeholders such as suppliers. He stated that one could not build trust in a relationship with stakeholders through digital channels, as the data was anonymous and could easily be manipulated. To build and maintain trust in business relationships, he and his firm arranged personal meetings. They set high value on personal interaction and thereby travelled regularly to the stakeholder's country.

"*Trust in digital anonymous information does not exist.*" (IC, 4)

The role of the lack of human interaction in using ICTs in the Fight against Corruption at SMEs

The parties involved in the use of ICTs do often not, or no longer, communicate face-to-face. The interviews show that some firms perceive such a lack of human interaction in the use of ICTs as a crucial challenge for SMEs. The inductively emerged code "lack of human interaction" captures this concern. Interviewees argue that for communication to be effective, the communicator, in this case the organisation, and the communicated information need to be reliable and credible. For this to be ensured, personal contact and face-to-face communication is required.

Trust only generated through human interaction. Interviewee C stressed that because communication through digital tools is anonymous, it is neither effective nor does it generate trust. Anonymity acts as an incentive for illicit behaviour and the concealing thereof.

"Digitalisation is just anonymity. When you are anonymous, there is a lot you can do and a lot you can hide. But when you have been in personal contact with each other and have worked together for a long time, it is like a relationship. Even a marriage is not digital, it is based on trust. Trust is only possible through human relationships." (IC, 5)

Anonymous information is untrustworthy. Interviewee C makes an example of his firm's relationship with their cocoa bean suppliers in Ghana. He stresses that it is important to the firm that they regularly visit the production site, to be in personal contact with the business partners and their workers, and to scrutinise the operating processes, because only seeing the information digitally is not trustworthy to them.

"Trust in digital anonymous information does not exist." (IC, 4)

Importance of personal and analogue interaction. On how Interviewee C's firm generally communicates with stakeholders such as their Ghanaian suppliers, he responded by saying that it was mostly analogue communication which supported good business relationships.

"Analogue and really talking to each other and not only exchanging data." (IC, 6)

Getting a sense of how things are done in foreign country not possible through ICTs. Interviewee A explained that getting a sense of the how things are done in a foreign country, which is important in international business conduct, is not possible through the use of ICTs.

"I cannot get a sense for how a customer dialogue is held in a foreign country through Skype or other digital media." (IA, 1)

ICTs not useful in cases of distrust. Interviewee A also pointed out that ICTs were not useful in cases where there was distrust or a lack of trust among the partners. The lack of human interaction when using ICTs could not aid in generating trust, especially not in an already untrustworthy environment.

"Whether internationally or nationally, if, for example, you don't trust your sales department and don't trust the feeling of the sales department, then you cannot achieve anything with digital tools." (IA, 2)

Decreased importance of personal customer contact. Interviewee E contradicts the argument that the lack of human interaction in the use of ICTs is a risk especially in the digital product market, because in that segment the importance of face-to-face communication among stakeholders is decreasing.

"The more these platform topics or general digital topics and digital competitors enter the market, the less important personal customer contact becomes in this segment as well." (IE, 1)

Combination of ICTs and personal interaction necessary. Asked how digital tools could be used most effectively, Interviewee A said that they needed to be used in combination with personal interaction with stakeholders.

> *"Exactly, the combination is important. In my opinion all these network issues need to be dealt with in an analogue manner for years to come. But the administration simply has to be done digitally, so that that work can be taken off these people's hands, who are supposed to maintain personal networks and need the time to do so."* (IA, 3)

The bank at which Interviewee B works at wrote and published a report on ethics and digitalisation in which they stated that business relationships in the banking industry heavily relied on trust and that trust could not be cultivated digitally. The report stressed that communication in consulting processes required a combination of an analogue and digital approach. Only through personal contact could the bank discuss values with stakeholders or assess customers' creditworthiness.

> *"We must therefore be able to continue to follow our common sense in a digital society. We must not incapacitate ourselves by completely delegating our autonomy to robots with algorithms."* (IB, ethics and digitalisation report)

5. Discussion

Our analysis has revealed both opportunities as well as challenges for SMEs using ICTS in the fight against corruption. Impropriety prevention can be an opportunity of adopting ICTs and transparency for international SMEs due to the informality of their organisational structure and culture. Informal and improper handlings such as illicit transactions could likely occur at international SMEs because they tend to lack formalisation. For example, strict regulations could motivate smaller firms to engage in corruption. The fact that ICTs enable transparency and require conventions and regulations strengthens the argument that they may also be preventative measures against improper behaviour such as corruption, while on the other hand one can argue that ICTs can enable impropriety because disclosed data can be used for improper handlings (see, for example, ID, 1).

Furthermore, as stated by Interviewee D (ID, 3), using ICTs to signal corruption intolerance in foreign markets, for example through codes of conduct, can be an opportunity for international SMEs. That way an image of reliability and trustworthiness can be achieved and long-term business relationships and networks can be built, which is vital for SMEs.

The use of ICTs and the resulting transparency endangers the disclosed data to be used for cyber-crime purposes (Heimann & Mbiyavanga, 2018). International SMEs' informality, manifested in a lack of obligatory forms to effect money transfers, for example, may increase the commission of

cyber-crime. The hacker attack on Interviewee D's email account, where the CFO was told by email – seemingly by her boss, Interviewee D – to urgently transfer a high sum of money to a certain bank account, is a notable example of this (ID, 4).

As mentioned in the theoretical background and findings, the perceived trust towards an SME can play an important role when using ICTs to fight corruption. Interviewee B's firm is a prime example for this. The core strategy of the bank, in contrast to other common banks, is based on ethical standards, sustainability and transparency, which is one main reason why their stakeholders have great trust in them. The use of digitalisation through ICTs is a fundamental aid to transparency (Bertot et al., 2010). A statement published in Interviewee E's firm's nonfinancial report, that a reliable risk and compliance management system to fight corruption is especially advantageous to build trust, supports this argument (IE, nonfinancial report). Interviewee D claims that publishing a code of conduct and signalling corruption intolerance creates a sustainable public image of being a trustworthy firm (ID, 3). Nevertheless, a firm is expected to maintain those communicated values continuously. The act of disclosing information about a firm's activities requires critical reflection of those activities. Trust is a valuable factor when using ICTs and being transparent for international SMEs because of the fierce competition and their dependency on networks. A customer's trust in an SME can create a bond between the customer and the firm. This can be an advantage for the SME in a highly competitive market. Furthermore, trust of stakeholders in SMEs can strengthen stakeholder relationships and networks. With regard to anti-corruption ICTs in particular, publishing financial and sustainability reports and codes of conducts can bring about opportunities for international SMEs because they can now easily and at very low cost communicate to a wide range of stakeholders worldwide that they do not tolerate corruption and thus establish trust with such stakeholders. The interviews show, however, that there are not only such optimistic opinions on the role of ICTs in establishing trust: Interviewee C, for example, stated that trust cannot be created through the use of ICTs as it often goes along with a lack of human interaction as a crucial component of establishing or maintaining trust. The lack of human interaction experienced when using anti-corruption ICTs may be hindering for international SMEs because of their informality, low bargaining power, dependency on networks, the fierce competition and cultural differences among stakeholders. As Interviewee C explained (IC, 6), the informality of the international SME that he works for was shown in their attaching great importance to analogue interaction and personal relationships. This, in combination with the communication among users that takes place via technology rather than face-to-face, may lead to ineffective results when using ICTs for international SMEs. Not only because of their low bargaining

position do international SMEs rely on personal connections and relationships with stakeholders and thus stakeholder networks, but also because of their dependency on them. These relationships require frequent personal interaction in order to be maintained, which may not be guaranteed when relying too much on communication through ICTs. Personal relationships with stakeholders can also be a competitive advantage which may differentiate SMEs from their competitors but they may not be taking place when ICTs are used as the main communication channel to customers. In addition, an international SME needs to get to know the many cultural differences and adapt to the country-specific circumstances between itself and its stakeholders, in order to learn how to deal with them. According to Interviewee A this was not possible through digital tools but through personal contact, which is not ensured through the use of ICTs (IA, 2). Interviewee C perceived digital communication as anonymous (IC, 4). He argued that anonymous communication was not trustworthy, whereas personal contact could be conducive to trustworthiness. In an ethics and digitalisation report, Interviewee B's firm warns not to rely too heavily on digitalisation and claims that business decisions still need to be based on common sense (IB, ethics and digitalisation report). Interviewee E's statement, that in an increasingly digitalised and digital market personal contact among stakeholders was becoming less important (IE, 1), is a counter-argument to the lack of human interaction being hindering for international SMEs when using ICTs. ICTs enable exchange with various users and communities of diverse experiences, where personal interaction is not relevant. The lack of human interaction may also be advantageous for SMEs in their fight against corruption when trust is not existent in the business relationship, for instance when a business partner is rated as potentially corrupt. As an example, a Swiss SME needs to get a license in order to establish a foreign subsidiary. Instead of having to deal with local government officials in person, where demanding of bribes would be likely, these transactions could be carried out online and the exact transaction amount disclosed. The lack of human interaction being an advantage can also apply to communication canals such as anonymous whistleblowing sites provided by firms or state institutions, for example, that allow sharing experiences of corrupt handlings with authorities or other organisational members. As mentioned above, the interviews show that there are contradicting opinions on whether the use of ICTs is more of an aid or a hindrance for international SMEs. Interviewee C stated that trust could not be generated through the use of digital tools because of the lack of human interaction that the digital aspect created, and therefore ICTs were not suitable tools for SMEs to use to communicate with stakeholders (IC, 5). The example of the bank at which Interviewee B is employed at shows that while the firm frequently used ICTs and was transparent, stakeholders had trust in them, although this trust was not merely generated through

the use of these ICTs. The firm's ethical standards, their actions that were based on these standards and the personal interaction of the firm with its stakeholders were the basis of this trust. The use of ICTs and the transparency merely strengthened the trust. As Interviewee C mentioned (IC, 5), trust was based and needed to be built on human interaction. Trust needed already to exist before a firm could adopt and rely on ICTs. Only after a basis of trust between stakeholders and a firm had been formed could ICTs be adopted to maintain the trust. Interviewee A's statement (IA, 2), that digital tools were not effective if trust was not already existent between a firm and its stakeholders, supported this argument. Interviewee E's firm also makes this point by explaining that their intention to publish a code of conduct lies in maintaining and further developing trust (IE, code of conduct). As Interviewee A also stated, digital tools were most effective when used in combination with personal, face-to-face communication (IA, 3). In the context of reducing possibilities for corruption, ICTs and transparency could be adopted, but analogue communication with stakeholders to build trust needed to be guaranteed. These relationships between international SMEs and their stakeholders need to be based on a constructive amount of trust in order for the use of anti-corruption ICTs to be efficient. A too high degree of trust in a firm could result in risks such as gullibility (see IC, 3), where someone might blindly trust any information that is given through ICTs. This high degree of trust could be taken advantage of and thus ICTs (Langfred, 2004; Tonoyan, 2004) could be used to publish false information.

Theoretical model

Fig. 2: Theoretical model: ICTs as an opportunity or risk for international SMEs in the fight against corruption (in italics).
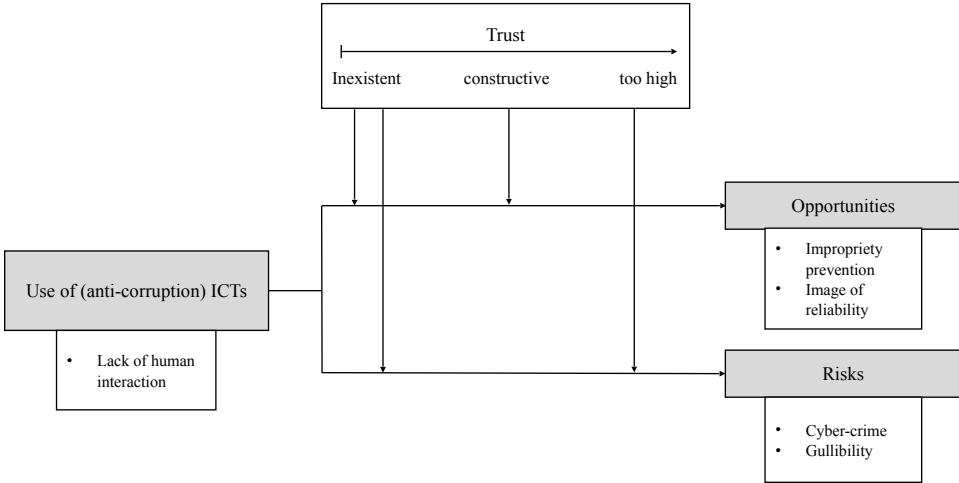

Figure 2 shows the theoretical model emerging from our empirical analysis. The model depicts the interrelationships between the use of ICTs and the perceived opportunities and risks for international SMEs in the fight against corruption. It shows what opportunities and risks may arise when using ICTs to fight or prevent corruption depending on the degree of trust between SMEs and their business partners. In our theoretical model, the use of ICTs and the thereby increased transparency constitute the independent variable, which lead to positive or negative outcomes, being the opportunities and risks. Our findings show that the lack of human interaction can be considered as an attribute of the form of communication of ICTs. The increased lack of human interaction as well as increased transparency by using ICTs can either lead to opportunities or risks. Considering our findings, we argue that trust may be seen as an explanatory factor for the opportunities and risks and thereby contributes as a moderator. Depending on the degree of trust between an international SME and a stakeholder, their use of ICT to fight corruption may lead to opportunities or risks. We argue that a constructive amount of trust leads to opportunities for SMEs when using ICTs to fight corruption, for example if a stakeholder and an SME are already in a trusting relationship and that trust is maintained. The use of ICTs may pose a risk when this trust becomes too high and lead to overreliance. For example, false information can be disclosed knowing that it is trusted blindly and not scrutinised. In situations where there is no trust, the use of ICTs and the lack of human interaction can lead to opportunities

such as impropriety prevention through third party verification and controls (see IC, 1). Other voices suggest that where trust is not existent, ICTs are not effective to fight corruption for international SMEs, as trust needs to be built through personal communication (see IA, 2, and IC, 5).

6. Conclusion

This study contributes to closing the current knowledge gap regarding the influence of technology on the fight against corruption at international SMEs (Bertot et al., 2010; Branco and Delgado, 2012; Davies and Fumega, 2014; Heimann and Mbiyavanga, 2018; Mahmood, 2004). We outlined central opportunities and risks (Tonoyan, 2004). that can arise for international SMEs when incorporating technology in their organisational practices to prevent and fight corruption and to achieve transparency (Aterido et al., 2011; Bennedsen et al., 2009; Hauser and Kronthaler, 2014; Murillo and Lozano, 2006; Wickert, 2016). We added a theoretical model to the existing literature illustrating that the degree of trust between an international SME and a stakeholder can play a role in whether using anti-corruption ICTs lead to opportunities or risks. On the one hand, statements from the interviews and analysed documents confirmed that trust towards a firm can arise from using ICTs. On the other hand, the interviews and documents also revealed that the use of ICTs can be ineffective when the shared information is not perceived as reliable or trustworthy in case of lacking human interaction (Langfred, 2004). Consequently, our findings suggest that the anonymity created through technology needs to be overcome in order to make ICTs an effective tool for international SMEs in the fight against corruption. The popular opinion voiced in the interviews is that the combination of personal interaction and the use of ICTs are important to create an environment of trust and corruption intolerance. The interviews reveal that a constructive basis of trust between stakeholders and a firm should already exist before the use of ICTs can generate trust on a wider, faster and ongoing basis. Nevertheless, disclosed information must be subjected to scrutiny by its receivers. In the case of trust being inexistent between an SME and a stakeholder, the interviews reveal that the use of anti-corruption ICTs can lead to opportunities or to risks for SMEs. The interviews also showed that the use of ICTs can increase the likelihood of cyber-crime being committed, which could create possibilities for corrupt behaviour. The practical implication resulting from our study is that international SMEs should be aware of their basis of trust with the respective business partners and the role of personal interaction before they decide to use ICTs to fight or prevent corruption. For both anti-corruption ICTs and ICTs to create transparency to be effective, they need to be adopted across

industries and in combination with governmental and institutional anti-corruption efforts.

Limitations and future research

Naturally, this study is not without limitations, and hence offers a range of opportunities for future research. Firstly, as is common for qualitative research, our findings are based on a small sample of organisations. In addition, the international SMEs that were referenced in the interviews are part of a heterogeneous mix of industries. Therefore, the findings may not be representative for the whole spectrum of internationally active SMEs but solely speak to the interviewed SMEs. They may also be biased due to our preselection of organisations. Secondly, as the aforementioned sensitivity of the issue of corruption suggests, questioning the interviewees on the issue of anti-corruption was only possible to a certain extent and had to be handled delicately. This proved to be a hindrance to answering the research questions as the interviews did not provide much specific information on anti-corruption per se.

As the literature and the results of the conducted interviews suggest, digitalisation is increasingly used and valued by businesses for their organisational practices and processes and to reduce corruption. In addition, the development of SMEs in international markets is crucial for a progressive economy. The relevance of the subjects of technology, anti-corruption and international SMEs is apparent, and further research on the subjects is therefore necessary and important. An exciting avenue for future research is analysing the relation between the perceived opportunities and risks of anti-corruption ICTs and the specific characteristics of international SMEs, in order to see under which conditions these opportunities and risks prevail. Although the choice of qualitative research on the subject seems appropriate, future research could benefit from a larger number of conducted interviews for the results to be more representative for the research subject.

References

Aguilera, R.V. & Vadera, A.K. (2008). The dark side of authority: Antecedents, mechanisms, and outcomes of organizational corruption. *Journal of Business Ethics, 77*(4), 431-449.

Amal, M. & Filho, A.R.F. (2010). Internationalization of small- and medium-sized enterprises: a multiple case study. *European Business Review, 22*(6), 608–623.

Argandoña, A. (2003). Private-to-private corruption. *Journal of Business Ethics, 47*(3), 253-267.

Ashforth, B.E. & Anand, V. (2003). The normalisation of corruption in organisations. *Research in Organizational Behavior, 25,* 1-52.

Aterido, R., Hallward-Driemeier, M., & Pagés, C. (2011). *Does expanding health insurance beyond formal-sector workers encourage informality? Measuring the impact of Mexico's seguro popular*. The World Bank.

Becker, K., Hauser, C., & Kronthaler, F. (2012). Auslandskorruption bei Schweizer Unternehmen. *Volkswirtschaft-Magazin für die Wirtschaftspolitik, 85*(10), 63-66.

Bennedsen, M., Feldmann, S.E., & Lassen, D.D. (2009). Strong firms lobby, weak firms bribe: A survey-based analysis of the demand for influence and corruption. *Weak Firms Bribe: A Survey-Based Analysis of the Demand for Influence and Corruption (November 9, 2009)*.

Bertot, J.C., Jaeger, P.T., & Grimes, J.M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly, 27*(3), 264-271.

Bhatnagar, S. (2003). E-government and access to information. In *Global Corruption Report 2003*, 24-32. Berlin, Transparency International.

Branco, M.C. & Delgado, C. (2012). Business, social responsibility, and corruption. *Journal of Public Affairs, 12*(4), 357-365.

Corbin, J., & Strauss, A. L. (2014). *Basics of qualitative research* (4 ed.). Los Angeles, CA: Sage.

Davies, T. & Fumega, S. (2014). *U4 ISSUE Mixed incentives: Adopting ICT innovations for transparency, accountability, and anti-corruption*. Retrieved from www.U4.no

Djankov, S., McLiesh, C., & Klein, M.U. (Eds.). (2004). *Doing business in 2004: Understanding regulation* (Vol. 1). Washington, D.C.: World Bank Publications.

Ellis, P.D. (2011). Social ties and international entrepreneurship: opportunities and constraints affecting firm internationalization. *Journal of International Business Studies, 42*(1), 99-127.

European Commission. (2019). Retrieved from https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

Gans-Morse, J., Borges, M., Makarin, A., Mannah-Blankson, T., Nickow, A., & Zhang, D. (2018). Reducing bureaucratic corruption: Interdisciplinary perspectives on what works. *World Development, 105,* 171-188.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia Methodology. *Organizational Research Methods, 16*(1), 15-31.

Gordon, K. & Miyake, M. (2001). Business approaches to Ccmbating bribery: A study of codes of conduct. *Journal of Business Ethics, 34,* 161-173.

Grunert, J. & Norden, L. (2012). Bargaining power and information in SME lending. *Small Business Economics, 39*(2), 401-417.

Habib, M. & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of International Business Studies, 33,* 291-307.

Hauser, C. & Kronthaler, F. (2014). Neue Märkte, neue Risiken. In *Mittelständische Unternehmen*, 37-60. Springer Gabler, Wiesbaden.

Heimann, F. & Mbiyavanga, S. (2018). Globalization and digital revolution. In *Confronting corruption* (p. Confronting corruption, chapter 22). Oxford University Press.

Hlatshwayo, S., Oeking, A., Ghazanchyan, M., Corvino, D., Shukla, A., & Leigh, L. (2018). *The measurement and macro-relevance of corruption: A big data approach*. International Monetary Fund.

Hopf, C. (2017). Qualitative Interviews: Ein Überblick. In U. Flick, E. von Kardorff, & I. Steinke (Hrsg.), *Qualitative Forschung: Ein Handbuch,* 349–360. Reinbek bei Hamburg: Rowohlt Taschenbuch Verlag.

Jenkins, H. (2006). Small Business Champions for Corporate Social Responsibility. *Journal of Business Ethics, 67,* 241-256.

Kalina, O., Köppl, S., Kranenpohl, U., Lang, R., Stern, J., & Straßner, A. (2003). Das Handwerk der Literaturrecherche. In *Grundkurs Politikwissenschaft: Einführung ins wissenschaftliche Arbeiten* (pp. 74-110). VS Verlag für Sozialwissenschaften, Wiesbaden.

Lepoutre, J. & Heene, A. (2006). Investigating the impact of firm size on small business social responsibility: A critical review. *Journal of Business Ethics, 69*(3), 257-273.

Loane, S. & Bell, J. (2006). Rapid internationalisation among entrepreneurial firms in Australia, Canada, Ireland and New Zealand: an extension to the network approach. *International Marketing Review, 23*(5), 467-485.

Mahmood, R. (2004). Can information and communication technology help reduce corruption? How so and why not: Two case studies from South Asia. *Perspectives on Global Development and Technology, 3*(3), 347-373.

Meuser, M., & Nagel, U. (1989). Experteninterviews – vielfach erprobt, wenig bedacht: Ein Beitrag zur qualitativen Methodendiskussion. In D. Garz & K. Kraimer (Hrsg.), *Qualitativ-empirische Sozialforschung,* 441–471. Opladen: Westdeutscher Verlag.

Murillo, D. & Lozano, J.M. (2006). SMEs and CSR: An approach to CSR in their own words. *Journal of Business Ethics, 67,* 227-240.

Nyuur, R.B., Brecic, R. & Debrah, Y.A. (2018). SME international innovation and strategic adapriveness: The role of domestic network density, centrality and informality. *International Market Review, 35*(2), 280-300.

Robertson, C.J. & Watson, A. (2004). Corruption and change: The impact of foreign direct investment. *Strategic Management Journal, 25,* 385-396.

Rodriguez, P., Siegel, D. S., Hillman, A., & Eden, L. (2006). Three lenses on the multinational enterprise: Politics, corruption, and corporate social responsibility. *Journal of International Business Studies, 37*(6), 733-746.

Rodriguez, P., Uhlebruck, K. & Eden, L. (2005). Government corruption and the entry strategy of multinationals. *Academy of Management Review, 30,* 383-396.

Schembera, S., & Scherer, A. G. (2017). Organizational strategies in the context of legitimacy loss: Radical versus gradual responses to disclosed corruption. *Strategic Organization, 15*(3), 301-337.

Schiffer, M., & Weder, B. (2001). *Firm size and the business environment: Worldwide survey results*. The World Bank.

Shim, D.C. & Eom, T.H. (2008). E-government and anti-corruption: Empirical analysis of international data. *International Journal of Public Administration, 31,* 298-316.

Shim, D.C. & Eom, T.H. (2009). Anticorruption effects of information communication and technology (ICT) and social capital. *International Review of Administrative Sciences, 75*(1), 99-116.

Smith, K. (2001). Assessing the economic impacts of ICT. Paper presented at the Future of Innovation Studies Conference, Eidhoven Univsersity of Technology, 21-23 September.

Spence, L. (2007). CSR and small businesses in a European policy context: The five 'C''s of CSR and small business research agenda. *Business and Society Review, 112,* 533-552.

Spence, L. & Lozano, J. (2000). Communicating about ethics with small firms: Experiences from the U.K. and Spain. *Journal of Business Ethics, 27,* 43-53.

Theobald, R. (1990). *Corruption, development and underdevelopment*. Durham: Duke University Press.

TI (Transparency International). (2018). Corruption Perceptions Index 2017. Retrieved from Transparency International https://www.transparency.org/news/feature/corruption_perceptions_index_2017

Tonoyan, V. (2004). The bright and dark sides of trust: Corruption and entrepreneurship.

In H.-H. Höhmann & F. Welter (Eds.), Trust and Entrepreneurship: A West-East-Perspective. Cheltenham: Edward Elgar.

UNIDO & UNODC (United Nations Industrial Development Organization &United Nations Office on Drugs and Crime. (2012). *Corruption prevention to foster small- and medium-sized enterprise development: Volume II*. Vienna: UNIDO & UNODC.

USAID (United States Agency for International Development). (1999). *Handbook on fighting corruption*. Washington DC: Author. U.S. Census Bureau (2009). Available: http://census.gov

Weyzig, F. (2009). Political and economic arguments for corporate social responsibility: Analysis and a proposition regarding the CSR agenda. *Journal of Business Ethics, 86*(4), 417-428.

Wickert, C. (2016). "Political" corporate social responsibility in small- and medium-sized enterprises: A conceptual framework. *Business & Society, 55*(6), 792-824.

Wymenga, P., Spanikova, V., Derbyshire, J. & Barker, A. (2011). *Are EU SMEs recovering?* Rotterdam: Ecorys Netherland BV.

Appendix: Interview guide

Structure	Questions
Introductory questions	How long have you worked at firm X? What are the central tasks in your function at firm X?
Thematic block I: **International market & sta-keholders**	What are the central challenges your firm faces in its international business activities? What are the most important two or three stakeholders your firm has to deal with in the international market? (suppliers, customers, government representatives/ licensors, etc.) What expectations do the respective stakeholders have of your firm with regard to business practices, sales commissions, informal payments, etc.?
Thematic block II: Practices & processes	What organisational practices or processes does your firm have to meet these expectations? (Code of conduct, training, monitoring, (anonymous) reporting mechanism for misconduct, etc.) How and why have the practices and processes evolved over time? Does digitalisation have an impact on your compliance and sustainability practices? If so, how and why? If not, why not? (Greater reach for communication with customers, the public, greater awareness of potential risks, lower costs for compliance (accounting software, online training and audits, etc.))
Closing questions	What are the next steps planned in regard to compliance and sustainability? Where do you see future challenges? Is there anything else you would like to add?