

Journal of Intelligence Studies in Business



Journal of Intelligence Studies in Business

Publication details, including instructions for authors and subscription information: <https://ojs.hh.se/index.php/JISIB/index>

The linkage between competitive intelligence and competitive advantage in emerging market business: A case in the commercial vehicle industry

Stefan Zwerenz^{a,*}

^aMAN Truck and Bus SE, Germany

*tefan.zwerenz.sz@googlemail.com

To cite this article: Zwerenz, S. (2020) The linkage between competitive intelligence and competitive advantage in emerging market business: A case in the commercial vehicle industry. *Journal of Intelligence Studies in Business*. 10 (3) 38-62.

Article URL: <https://ojs.hh.se/index.php/JISIB/article/view/588>

PLEASE SCROLL DOWN FOR ARTICLE

This article is Open Access, in compliance with Strategy 2 of the 2002 Budapest Open Access Initiative, which states:

Scholars need the means to launch a new generation of journals committed to open access, and to help existing journals that elect to make the transition to open access. Because journal articles should be disseminated as widely as possible, these new journals will no longer invoke copyright to restrict access to and use of the material they publish. Instead they will use copyright and other tools to ensure permanent open access to all the articles they publish. Because price is a barrier to access, these new journals will not charge subscription or access fees, and will turn to other methods for covering their expenses. There are many alternative sources of funds for this purpose, including the foundations and governments that fund research, the universities and laboratories that employ researchers, endowments set up by discipline or institution, friends of the cause of open access, profits from the sale of add-ons to the basic texts, funds freed up by the demise or cancellation of journals charging traditional subscription or access fees, or even contributions from the researchers themselves. There is no need to favor one of these solutions over the others for all disciplines or nations, and no need to stop looking for other, creative alternatives.

The linkage between competitive intelligence and competitive advantage in emerging market business: A case in the commercial vehicle industry

Stefan Zwerenz^{a,*}

^aMAN Truck and Bus SE, Germany

*Corresponding author: Stefan.zwerenz.sz@googlemail.com

Received 8 September 2020 Accepted 26 October 2020

ABSTRACT To achieve competitive advantage (CA) in emerging markets (EM) firms are suggested to increase market orientation, using competitive intelligence (CI) as a source to increase firm performance. However, in-depth linkage between CA and CI, as well as its awareness/culture and process/structure constructs, has been researched and understood only in a limited way in general and for EM business in particular. This paper gives in-depth clarification of six research questions relating to the connection between CI, its constructs and CA for EM business as well as how CI as a product/process could be adapted for a larger impact on CA. It reports on a qualitative, document and interview data based in-depth single case study at a CI department of a European Union (EU) commercial vehicle manufacturer engaging in EM business. It finds that overall the linkage of CI for CA was traceable and transparent to users/generators of CI in the specific case with ambiguously perceived limitations, and influenced by seven identified factors. Seven out of eight pre-identified CI constructs were promoted but also heterogeneously understood as contributing to CA, with no other relevant constructs identifiable. Adaptions for more impact on CA were recommended for CI as a product in a limited sense, and as a process with eight potential levers more comprehensively. These results help businesses to improve CI, its constructs, its products and process for a better linkage to CA and firm performance.

KEYWORDS Competitive advantage, competitive intelligence, firm performance

1. INTRODUCTION

Emerging markets (EM) became highly attractive target markets in the last two decades (London and Hart, 2004; GoldmanSachs, 2007, 2011; International Monetary Fund, 2011) as part of firm growth strategies to expand to new markets (Ansoff, 1965). They are characterized as turbulent, high velocity, unstable, unpredictable and high rivalry environments, quickly changing in opportunities and threats (Pillania, 2009; Chen, Riitta, McDonald & Eisenhardt, 2010). This requires firms' to respond by adjusting

management activities (Fahy, 2002) to not lose their competitive advantage (CA) (Cuervo-Cazurra, Maloney & Manrakhan, 2007). That is why "today's business environment demands a comprehensive system for managing risks in the external business environment" (Calof & Wright, 2008, p.3) for rapid competitive and strategic maneuvering (Thomas & D'Aveni, 2009). Hence, "with high market turbulence and high competitive intensity it is crucial to continually gather and utilize market information to adapt adequately. Under these conditions, a market orientation is assumed to

represent a superior market learning capability, giving a competitive advantage” (Ottesen & Gronhaug, 2004, p.956). Moreover, academic writing proposes that competitive intelligence (CI) can deliver required knowledge of the external environment (Kohli & Jaworski 1990; Trim, 2004; Dishman & Calof, 2008; Fleisher, Wright & Allard, 2008; Prior, 2009; Wright 2013) for firm competitiveness (Maune, 2014). Nevertheless, the linkage between CI and CA has been researched in only a limited way in general (Miles & Darroch, 2006; Seyyed Amiri, Shirkavand, Chalak & Rezaeei, 2017) and for EM business in particular (Adidam, Banerjee & Shukla, 2012). In the quest for superior firm performance in EM business, in-depth understanding of that linkage is considered critical (Kumar, Jones, Venkatesan & Leone, 2011). This study aims for in-depth understanding of the linkage between CI, its constructs and CA with regard to its perceived potential and transparency amongst CI generators and users. Furthermore, it clarifies how CI as a process and a product can be managed and/or modified for CA in EM business.

2. LITERATURE REVIEW AND KNOWLEDGE GAP

The literature proposes a connection between the concepts of CA and environmental based knowledge (Day & Wensley, 1988; Civi, 2000; Hult, Ketchen & Slater, 2005; Ketchen, Hult & Slater, 2007; Voola & O’Cass, 2008). Enhancing that conceptual idea, an empirically supported (April & Bessa, 2006; Badr, Madden & Wright, 2006; Kumar et al., 2011; Adidam, Banerjee & Shukla, 2012; Seyyed Amiri et al. 2017), but not undisputed (Connor, 2007; Ketchen, Hult & Slater, 2007; Qiu, 2008; Kraaijenbrink, Spender & Groen, 2010) linkage between firm performance, CA and the concept of CI was found in existing research (Figure 1).

However, the concept of CI itself was heterogeneously defined (Wright & Calof, 2006; Bisson, 2014; Grezes, 2015) and described with varying terminology (Table 1), causing difficulties identifying a comprehensive body of academic knowledge.

Nevertheless, conceptual frameworks for the complex (Dishman & Calof, 2008; Saayman et al., 2008, Nasri, 2012) connection between CI, its constructs, CA and firm performance (Nadkarni & Barr, 2008; Qiu, 2008; Nasri, 2012) were identifiable in the literature. Based

on two suggested overarching viewpoints of CI (Seyyed Amiri et al., 2017)—process and structure (Gayoso & Husar, 2008; Saayman et al, 2008) as well as organizational CI awareness and culture (Nasri, 2012; Asghari, Targholi, Kazemi, Shahriyari & Rajabion, 2020)—it was advocated for potential links to CA contributing and non-contributing CI constructs (Lewis, 2006; Maune, 2014). Eight CI constructs were identified from the reviewed literature as being potentially relevant to CA: 1. Intelligence timing (April & Bessa, 2006; Nadkarni & Barr, 2008), 2. Intelligence type (Momeni & Mehrafzoon, 2013; Bisson, 2014), 3. Organisational intelligence activity integration (Adidam, Banerjee & Shukla, 2012; Fatti & du Toit, 2012), 4. The communication channel through which intelligence is filtered through the organization (Rothberg & Erickson, 2012; Barnea, 2014), 5. Structured, purposeful collection of intelligence (Adidam, Banerjee & Shukla, 2012; Rothberg & Erickson, 2012), 6. Capability of the organization to convert information into action (Kamya et al., 2010; Adidam, Banerjee & Shukla, 2012), 7. Organizational resource allocation to intelligence activities (Salvador and Reyes, 2011; Ngo & O’Cass, 2012), and 8. Organizational attitude to environmental change pressures (Momeni & Mehrafzoon, 2013; Barnea, 2014).

Despite of these findings, “the means by which individual firms gain a competitive advantage and enhance corporate performance in a global environment remain poorly understood” (Fahy, 2002, p.58). This “... lack of empirical evidence” on how “knowledge [is empirically linked] to exceptional performance” or “how knowledge-based advantage is sustained” was also identified by McEvily & Chakravarthy (2002, p.285). Peteraf & Bergen (2003, p.1037) claimed that few “resource-based theorists have paid explicit attention to the conditions necessary and sufficient for competitive advantage of the temporary kind” in the context of CI activities. Only “more recently, strategists and strategy academics have focused their attention on CI as a means for further engendering sustained competitive advantage for businesses” (April & Bessa, 2006, p.86). Ichijo & Kohlbacher (2008, p.181) motivated other scholars to “conduct further... studies... of other global players in order to analyze the process of... knowledge creation in different environments and under different conditions”. Further in-depth

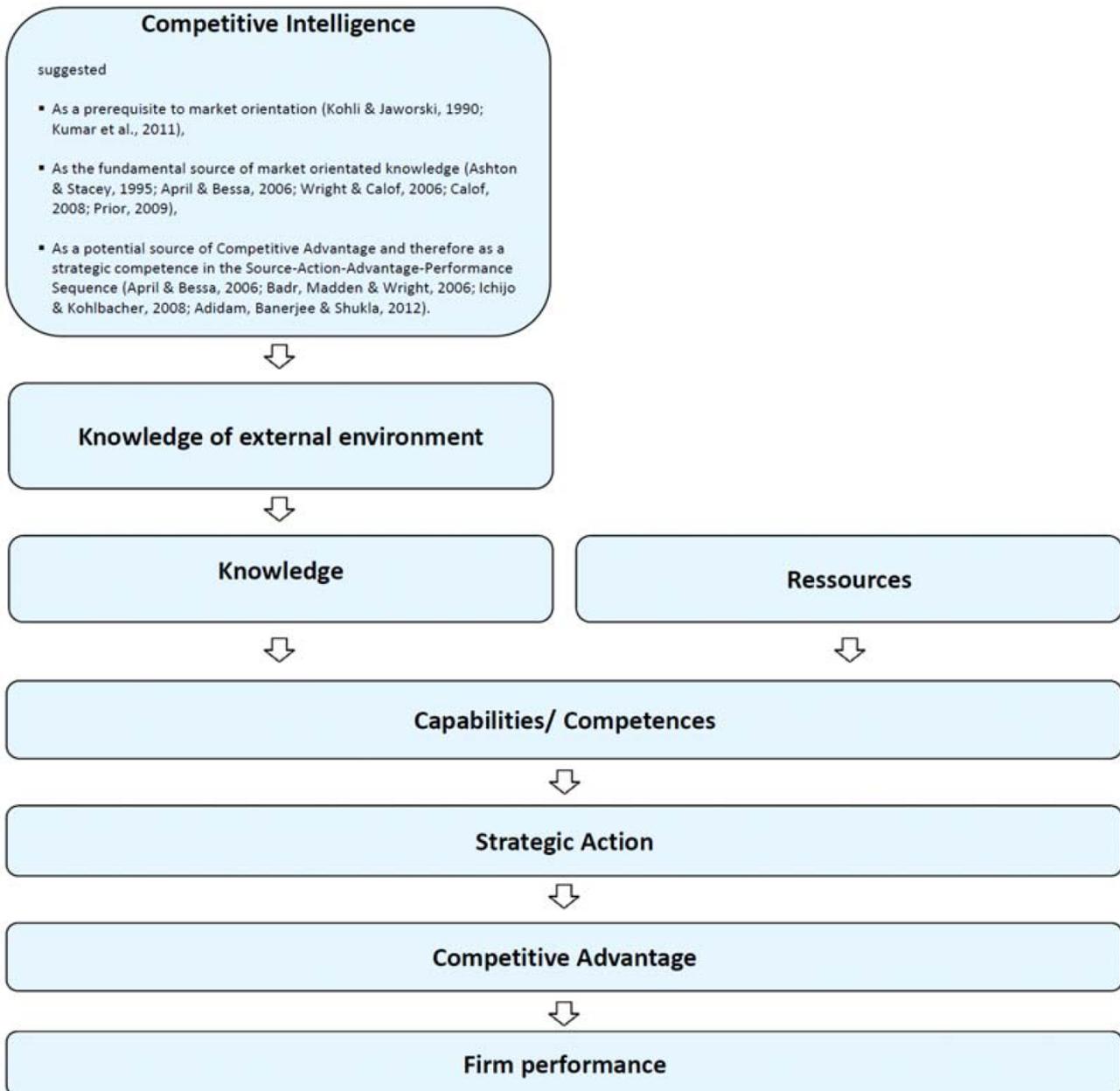


Figure 1 CI connection to competitive advantage and firm performance.

investigations for lacking empirical insights on the if-and-how to create and sustain CA by CI in different industry, firm or country settings were suggested to be required (Kumar et al., 2011, p.16): “Few studies have investigated the longer-term benefits of market orientation” beside the intensive academic quest for in-depth understanding of superior firm performance in global business environments. Hence, “there is little empirical work linking the impact of a firm’s CI activities on a firm’s performance” (Adidam, Banerjee & Shukla, 2012, p.242-243) and despite that, “there is much empirical research on planning and performance in general, but no major research on CI and performance” (Jenster & Solberg Søilen, 2013, p.16). Also “formalising... the constructs of competitive intelligence” lacked

sufficient prior research (Saayman et al., 2008, p. 383). All in all, the linkage of CA relevant CI constructs was indicated by academics as still being under-researched with regard to a systematic investigation approach. Combined research in CI constructs that could potentially contribute to CA was rarely conducted or analyzed in-depth. Moreover, little research was identifiable on CA relevant CI constructs for EM business (Ezenwa, Stella & Agu, 2018), despite its growing importance (Global Intelligence Alliance, 2011). This was surprising, since in “increasingly discontinuous environmental change” (Civi, 2000, p.169) CA was frequently linked to the exploitation of market orientated knowledge strategies, making use of external environment insight generation, with internal

dissemination and responsiveness to these insights (Civi, 2000; Durand, 2003; Peteraf & Bergen, 2003; Ketchen, Hult & Slater, 2007). Additionally, “64% of global companies intend to increase their investments in competitive intelligence or market intelligence over 2012-2013, with a geographical focus on emerging markets in Asia and Latin America” (Global Intelligence Alliance, 2011, p.1). In that context Peyrot, Childs, van Doren & Allen

(2002, p.749) claimed, that “the greater the perceived competitiveness of an organization’s environment, the higher the level of competitive intelligence use”. Despite some academic coverage on EM (Poblano Ojinaga, 2018; Oubrich, Hakmaouia, Bierwolf & Haddanic, 2018; Nte, Omede, Enokie & Bienose, 2020) and related in-depth understanding of CI, CI constructs and CA linkage was perceived as scarce.

Table 1 Overview of identified terminology on intelligence.

Terminology		Source
Business	Intelligence	Ettorre (1995), Wright & Calof (2006), Nikolaos & Evangelia (2012), Köseoglu, Ross & Okumus (2016), McGonagle (2016), Saddhono, Chin, Tchuykova, Qadri, & Wekke (2019).
Competitive		April & Bessa (2006), Wright & Calof (2006), Brody & Wright (2008), Nadkarni & Barr (2008), Saayman, Pienaar, Pelsmacker, Viviers, Cuyvers, Muller & Jegers (2008), Prior (2009), Adidam, Banerjee & Shukla (2012), Jenster & Solberg Soilen (2013), Momeni & Mehrafzoon (2013), Barnea (2014), Bisson (2014), Calof (2014), Maune (2014), Calof, Mirabeau & Richards (2015), McGonagle (2016), Solberg Soilen (2017).
Competitor		Wright, Pickton & Callow (2002), Chakraborti & Dey (2016), Lee & Lee (2017), El-Muhtaseb (2018), Köseoglu, Mehraliyev, Altin & Okumus (2020).
Competitive Technical		April & Bessa (2006), Calof & Smith (2010), Salvador & Reyes (2011), Salvador & Banuelos (2012), Cerny (2016), Zhang, Robinson, Porter, Zhu, Zhang & Lu (2016).
Strategic		Lasserre (1993), Trim (2004), Pirttimäki (2007), Alnoukari, Razouk & Hanano (2016), Arcosa (2016), Walsh (2017), Levine, Bernard & Nagel (2017), Ben-Haim, (2018), Ahmadi, Baei, Hosseini-Amiri, Moarefi, Suifan & Sweis (2020).
Market		Wee & Ahmed (1999), Pirttimäki (2007), Nikolaos & Evangelia (2012), Rakthina, Calantone & FengWang (2016), Soilen (2017), Falahata, Ramayah, Soto-Acosta & Lee (2020).
Market	Surveillance	Nadkarni & Barr (2008), Colakoglu (2011).
Strategic	Analysis	Lessard (2003), Papulovaa, Gazovaa (2016), Seguraab, Moralesab & Somolinosa (2018), Köseoglu, Mehraliyev, Altin & Okumus (2020).
	Foresight	Rohrbeck, Heinrich & Heuer (2007), Mueller (2008), Kuosa (2016), Adegbile, Sarpong & Meissner (2017), Iden, Methlie & Christensen (2017), Stan (2017).
Marketing	Information	Wright & Ashill (1996), Fleisher, Wright & Allard (2008), Barakat, Shatnawi & Ismail (2016), Mandal (2018).
	Intelligence	Buechner & Mulvenna (1998), Wee (2001), Glance, Hurst, Nigam, Siegler, Stockton & Tomokiyo (2005), Wright & Calof (2006), Fleisher (2008), Göb (2010), Mandal (2017, 2018).
	Research	Walle (1999), van Birgelen, de Ruyter & Wetzels (2000), Wee (2001), Crowley (2004).
Environmental	Scanning	Ghoshal & Kim (1986), Babbar & Rai (1993), Bergeron & Hiller (2002), Calof & Wright (2008), Mueller (2008), Nikolaos & Evangelia (2012), du Toit (2016).
	Analysis	Mueller (2008), Dobson, Starkey & Richard (2004).
	Examination	Miles and Darroch (2006).
	Impact Analysis	Babbar and Rai (1993).
Knowledge	of markets	Voola and O’Cass (2008).
	of business environment	Civi (2000).
	Management	Weiss, (2002), Greiner, Bohmann and Krmar (2007), Nikolaos and Evangelia (2012).
Research and Analysis		Ghoshal and Kim (1986).

Concluding, three clear knowledge gaps emerged from the literature review. The need to better understand the transparency of the potential for CI to create and sustain CA in EM competition from the developed market firm perspective was identified (knowledge gap 1). Furthermore, a need for clarification was noticed on CI pre- or not yet identified constructs as potentially connected to CA (knowledge gap 2). Additionally, potential was seen for new insights on possible impacts on the core view of CI as a process and a product (knowledge gap 3).

3. RESEARCH QUESTIONS

The following research questions emerged from the knowledge gaps identified in the extensive literature review (Appendix 1 shows research question 1 as an example):

- (RQ1a) Can the potential of CI for CA be ascertained in the case setting?
- (RQ1b) How transparent is the potential of CI for CA for generators and users of CI in the case setting?
- (RQ2a) Do the underpinning CI constructs potentially contribute to CA in EM business?
- (RQ2b) Do CI constructs other than the underpinning potentially contribute to CA in EM business?
- (RQ3a) Is an adaptation of CI processes recommended to increase its potential for CA?
- (RQ3b) Is an adaptation of CI products recommended to increase its potential for CA?

4. RESEARCH METHODOLOGY AND DESIGN

4.1 Research approach and inquiry strategy

A pragmatism paradigm informed, qualitative research approach was chosen, as it was successfully used in comparable CI research contexts (April & Bessa, 2006). The author selected a mode of inquiry uniting deductive and inductive elements (Alasuutari, Bickman & Brannen, 2008) for desired insights into the pre-defined concepts, but also emerging ones. Empirical investigations were carried out in a unique and under-researched single case setting. Single-case studies are flexible enough to generate the required in-depth (Yin, 2003;

Van Wynsberghe & Khan, 2007), integrated insights into real-life contexts (Dubois & Gadde, 2002; Hancock & Algozzine, 2006) and highly individual experiences (Vissak, 2010) on complex phenomena in business management (Cepeda & Martin, 2005; Ghauri & Firth, 2009) and CI studies (April & Bessa, 2006; Fleisher, Wright & Allard, 2008; Ichijo & Kohlbacher, 2008, Salvador & Reyes, 2011; Salvador & Banuelos, 2012; Calof, Mirabeau & Richards, 2015). For research on CI and firm performance, Adidam, Banerjee & Shukla (2012, p.243) stated that “most literature addressing this issue has been... case-based”. Ichijo & Kohlbacher (2008) applied case study inquiry to investigate the automotive industry. Since no generalization but in-depth particularization was the aim of this study a single case was selected.

4.2 Selection of case industry, case firm, unit of analysis

The case industry was purposefully (Flyvbjerg, 2006; Ghauri & Firth, 2009) chosen due to its suitability (Eisenhardt & Graebner, 2007) to meet the research objectives: The EU commercial vehicle industry showed a very high degree of globalization (VDA, 2006), a high importance of emerging markets for the industry (KPMG, 2006), and of CI activities for EM business (Roland Berger Strategy Consultant, 2009b). Hence, one of the top European based original equipment manufacturers in that industry was chosen as the case firm since it evidently matched the criteria of globalization (Datamonitor, 2010), EM engagement (Collins Stewart, 2010), a high level of CI activities (Case firm, 2010b) and granted access for research purposes. A fairly complete capture of intelligence activities for EM business activities was believed to be achievable, with the case firm’s competitive intelligence department and its intelligence services being selected as a unit of analysis (Case firm, 2011a). This purposeful selection was expected to allow enriched understanding of the researched phenomena.

4.3 Data collection and analysis

Rigorous procedures for single case studies (Yin, 2003; Brereton, Kitchenham, Budgen & Li, 2008; Creswell, 2009) were applied. That is why empirical data for the six research questions was collected through a two-stage approach similar to Ichijo and Kohlbacher (2008). Extensive analysis of 77 documents

(Stage 1A: external documents; Stage 1B: case firm internal documents) followed by 18 semi-structured interviews with the case firm and industry experts (Stage 2). The research questions RQ1a/b, RQ2a/b and RQ3a/b were broken down in qualitatively formulated, open-ended sub-questions (Appendix 1 showing research question 1 as an example) to prepare and increase knowledge retrieval (Hancock & Alogzzine, 2006). A case study protocol and databases (Beverland & Lindgren, 2010) were established. Then, at the first stage more than 50 external reports, publications, articles and presentations from 27 trustworthy, carefully selected and expert-checked expert organizations as well as 30 case firm internal highly-relevant, member-checked presentations, reports, charts and tables were collected. A thorough content and thematic data analysis and interpretation (Bowen, 2009) was undertaken in a qualitative analysis software (NVIVO®) allowing early conclusions and informing the next data collection stage. To establish a transparent chain of evidence and explanation building, data was labelled in NVIVO® with codes, which were in turn categorized (Table 2), allocated to the research questions and assigned to themes reflecting viewpoint and argumentation patterns. Then patterns in the data were matched, negative, discrepant or rivalling insights were addressed and additional documents were searched for; the rivalling explanations were taken further.

From the six original research questions, the sub-questions and the early insights from stage 1, interview questions (Appendix 1 showing research question 1 as an example) for the semi-structured interview guideline

master were prepared for a comparable “thematic approach” in each interview (Qu & Dumay, 2011, p.364) which were piloted with two respondents. The experts were purposefully (Rowley, 2012) screened with 10 established criteria and 6 external experts and 12 internal experts were sampled (Appendix 2) from the total of 30 experts approached. This procedure ensured that the 18 respondents (Appendix 2) promised valuable and fairly exhaustive input from different perspectives and viewpoints. The interviews were compliant with research ethics and data protection acts, lasted 45 to 70 minutes and were carried out in person or via telephone. During the interviews, notes were taken or the interviews were audio-recorded. Each completed interview was transcribed to NVivo®, was run through constant comparison analysis procedures (Leech & Onwuegbuzie, 2007) and industry and firm experts’ member checking - allowing incremental improvements in data collection, analysis and interpretation. The iterative analysis covered the transfer of interview data and memos to NVivo®, coding of interview data (with emerging, in vivo and constructed codes from stage 1), building a code structure by member-checked categorization of code, allocation to the six research questions as well as construction of themes. While analyzing interview after interview, the initial code list from stage 1 was extended and enhanced by a hierarchical structure via axial coding. Different themes were interrelated and then also categorized after reflection on the six research questions. Where necessary, respondents were revisited during the analysis and interpretation stage.

Table 2 Extract of code system structure.

Categories	Codes applied	Relevance to research focus
Intelligence role explicitly mentioned	Intelligence term used	RQ 1
	Other terms used	RQ 1
Intelligence role indicated	Market by market understanding advocated	RQ 1a, 1b, 2a, 2b
	Market orientation as key success factor	RQ 1a, 1b, 2a, 2b
	Other (indication of intelligence role)	RQ 1a, 1b, 2a, 2b
Link CI to CA given	Market intelligence as key success factor for CA to CA	RQ 1a
	Intelligence as a strategic advantage	RQ 1a
Intelligence constructs used	Content relevance	RQ 2a, 2b
	Organisational level	RQ 2a, 2b
	Timeliness	RQ 2a, 2b
Intelligence insights reflecting emerging market specifics	Geopolitical specifics	RQ 1a, 1b, 2a, 2b
	Dynamism	RQ 1a, 1b, 2a, 2b
	Speed of change	RQ 1a, 1b, 2a, 2b

As required for single case studies (Baxter & Jack, 2008), existing theory was extensively used for comparison with empirical results. In the analysis stage, the empirical findings on the perception and transparency between CI and CA (RQ1a/b), on the pre-identified or other CI constructs' relationship to CA (RQ2a/b), and on the CI process and product adaptation needs for emerging market business (RQ3a/b). Further, other emerging themes on the research focus were constantly and consequently compared to the theoretical frameworks from the literature. They were also matched with already retrieved findings from our own data collection. Moreover, two industry experts reviewed the case draft.

5. STUDY RESULTS

5.1 Potential and transparency of CI as a source for CA

In the examined research setting, potential of CI for CA was traceable (RQ1a). However, classic manufacturing industry competences such as "purchasing" (Kern, 2009), "engineering" (Roland Berger Strategy Consultants, 2009a, 2009b; R 1, 3, 4, 5, 14, 15, 17), "production" (Frost & Sullivan, 2011; R1, 5, 13, 17 B4a), or "sales or after sales activities" (McKinsey & Company, 2009a, 2009b; Roland Berger Strategy Consultants, 2009b) were still perceived as dominant potential sources for achieving "low-cost" (Roland Berger Strategy Consultants, 2009a, p.1) or differentiation advantages (McKinsey & Company, 2009a, 2009b).

Moreover, intelligence as a source required for advantageous positioning in the highly product-driven commercial vehicle industry was transparent to generators and users of CI in general (RQ1b). However, this was taken as partly limited and ambiguously perceived. The diverse understanding was retrieved as a very subjective perception as taken from the interviews of generators and users of CI data and literature (Kumar et al., 2011). In particular, transparency in the relationship between CI and CA was a better identifier in an emerging market setting. For example, the potential of CI was transparent to industry experts expressing in their reports that more market orientation for emerging market business is needed "in order to successfully implement... globalization strategy" (Roland Berger Strategy Consultants, 2009b, p.3) to

finally gain a higher competitiveness (Koegel Trailer GmbH & Co.KG, 2008; Roland Berger Strategy Consultants, 2009a, 2009b; PA Consulting, 2010; Frost & Sullivan, 2011; McKinsey & Company, 2011). Additionally, market orientation activities such as to "adapt... along local market expectations and the competitive environment" (PA Consulting, 2010, p.3-4), "assessing the competitive landscape" including "comprehensive market research" (McKinsey & Company, 2011, p.3) or listening to the "voice of customers" (Frost and Sullivan, 2011, page 5) were identifiable as signposts of a given transparency on the CI and CA relationship. Furthermore, statements such as "careful analysis of the markets" and "examine the obvious differences that exist between the triad and emerging markets" also proposed transparency of the potential of intelligence-based advantages to industry experts (Roland Berger Strategy Consultants, 2009b, p.3). This understanding matched with the central stance of market orientation as the "generation, dissemination and responsiveness to intelligence" for advantageous competitive positions (Kyriakopoulos & Moorman, 2004, p.224; Ichijo & Kohlbacher, 2008). Analyzed interview statements such as "for emerging market competition... competitive intelligence will... become a source of competitive advantage" (R10) also stated that "knowledge building and converting it into action" is an essential asset for CA (R16) as perceived from existing research (April & Bessa, 2006; Badr, Madden & Wright, 2006) as well. It was said, that "intelligence in all fields... needs to be generated" (R2), avoiding blind spots for emerging market business. Another expert expressed that "knowledge building and converting it into action" is an essential asset for CA (R16). Experts added that "for emerging market competition of the future, competitive intelligence will most likely become a source of competitive advantage - since for the organization involving so far in low risk export business, missing market insights already used to be a competitive disadvantage in the past" (R10). Others were more reluctant on the potential of CI for CA stating that "competitive intelligence is too frequently only nice to know" (R13) or that the "full potential of BI... is not really used" (R7) or "exploited" (R8), questioning intelligence effectiveness (R6, R12) in an "industry [which] is too much product/engineering driven".

All in all, even for emerging markets transparency was less clearly identifiable than the proposed significant business challenge of these markets suggested (Peyrot et al., 2002). Concluding from the data, transparency on the CI/CA relationship was determined to be dependent on seven influencing factors: (a) industry or individual predominant mindsets, (b) individual risk awareness on CI target markets' complexity, volatility, and insecurity depending on firm or individual familiarity with intelligence target markets, (c) different purpose and objectives of CI, (d) the process of conducting CI (systematic, timely), (e) delivered or achievable quality of CI, (f) type of intelligence available, and (g) action being derived from CI/conversion capability of the firm.

5.2 Potential contribution of CI constructs to CA

Seven (#1,2,3,4,5,6 and 8) out of the eight pre-identified CI constructs from the literature were suggested as potentially contributing to CA in this study setting (RQ2a). Interestingly, the understanding of the single CI constructs' connection to CA was highly individually and frequently ambiguously retrieved from documents and interview data. Appendix 3 shows key insights found in the data for each construct and the understanding created from these. Due to the heterogeneity and the complexity of market drivers influencing the commercial vehicle industry in the emerging market setting (McKinsey & Company, 2011), as well as above-average product, sales and after sales complexity in the case industry (McKinsey & Company, 2011), intelligence timing (#1) was supported in its influence on CA. However, respondents also opposed that conclusion since "the commercial vehicle industry and commercial engine industry is due to long product cycles not involved in hyper-competition business environment" (R5). In line with Rothberg and Erickson (2013) respondents expressed the type of intelligence (#2) as "highly relevant" (R12) for CA, however also limiting it to "actionable knowledge" only (R17). However, this connection was also partly rejected for the case since "rare knowledge is not existing for this industry" (R10); this supported Greiner, Bohmann & Krcmar (2007, p.3) since "not all knowledge... activities have been shown to positively influence business performance or to result in a competitive advantage". Organizational intelligence activity integration (#3) was perceived as

potentially CA-relevant since it was stated that "for CA, involvement [of CI] in the strategy process is very important" (R17), advocating that CI needs to be closely linked to decision making to unfold impact on CA. Moreover, CI was demanded to be centralized since "CA most likely created in central functions which sees the company in its wholeness" (R11). However, the opinions on which organizational level CI unfolds its influence best ranged from all organizational levels to corporate level only. It could be concluded from the analyzed data to aim for well-balanced collection and dissemination between central and decentralized organizational units to outweigh biases on both sides (R9, 17) or to increase speed and timing (R16). Nevertheless, ambiguous perception of the influence of the organizational level CI construct for CA was also retrieved since it was understood as rather a prerequisite of CA than determining it (R15). In the communication channel through which intelligence is filtered through the organization (#4), internal and external respondents across business functions were almost unanimously convinced that it has an impact on CA creation in EM environments. This supported that "disseminating intelligence across the firm is one of the most critical components of effective competitive intelligence" (Adidam, Banerjee & Shukla, 2012, p.249). Respondents suggested to organize a more effective and efficient channel of collection and dissemination by reduction of process barriers ("the closer the channel to operative decision makers, the better", R7) to connect CI closer to decision making. Reduction of the number of involved stakeholders ("too many stakeholders are linked in the process between intelligence creation and usage, so channels are usually long and insights... get easily lost", R2), real-time insight access ("often access to intelligence is missing", R3), and IT tools (R3, R8) were believed to be supportive. Despite the positive perceptions, it was doubted that an ideal channel could be found at all to establish this construct as relevant for CA (R10). Interesting opinions were retrieved on CA influence of structured, purposeful collection of intelligence (#5) and the capability of the organization to convert information into action (#6). One group of respondents believed that both constructs influence CA relevance of CI (R1, 11, 13, 14, 15, 17). Others preferred the conversion capability since "the ability to convert... to action is key" (R13), "collection is important but the capability... might be an

outstanding asset" (R2) and conversion "plays a more important role than sheer collection and analysis of intelligence" (R3) since "unique knowledge in this industry is rare and success is more depending on how quick the insights can be converted into action by experience and talent" (R9). This was overall in line with Herring (1992, p.57) expressing that "successful strategies are derived from good intelligence" whereas "good intelligence by itself, will not make a great strategy" and Babbar & Rai (1993, p.105) stating that "intelligence is merely a necessary but not a sufficient condition for competitive vitality". Case firm internal as well as external experts supported the positive influence of organizational attitude to environmental change pressures (#8) on CA (R6, 8, 18). Respondents believed, that "continuity and a long-term holistic intelligence scope impact CA relevance" (R6) as an expression of organizational awareness for change in attitude and skills towards a greater outside in perspective is required to harvest the potential of CI best. It was claimed that through all hierarchical levels, from supervisory board, management board to each single member of staff, a change of attitude towards market orientation on the individual level is an essential prerequisite for successful CI exploitation (R8, R16).

Furthermore, to the above constructs, neither the last pre-identified construct, organizational resource allocation to intelligence activities (#7), nor any other construct's influence on CA was retrievable (RQ2b) in this study. However, the absence of other proposed constructs led to the conclusions that either no further constructs were of relevance in that case setting or that the respondents experience on the matter of CA relevant constructs did not go beyond the discussed constructs.

5.3 Recommended adaptations of CA as a product and a process for CA

On research question 3a only two major recommendations for EM business modification of CI products were identified (RQ3a). While documents provided no insights at all, it was expressed by a generator of CI, that on CI products for EM "the expectation is extremely high while at the same time uncertainty of the results is extremely high" (R18). CI in EM was said to be expected "to deliver not only decision relevant insights but delivering also the decision itself" (R11)

requiring the adaptation of the deliverables of CI wherever possible even more directly for direct decision making. Another pattern was identifiable with adapting the product towards full and more proactive transparency on insight reliability (R4, 5, 8, 14, 15, 17). R5 as a user of CI also experienced the even more evident necessity in insecure and highly volatile business environments to "highlight obviously existing higher uncertainty in results" as also identified in Tao and Prescott (2000), suggesting a quality framework determining timeliness, accuracy and reliability of intelligence for EM CI.

On research question 3b (RQ3b), dealing with CI as a process, more comprehensive recommendations for optimization were retrievable for EM from the literature (Gayoso & Husar, 2008). It identified stages of planning, collecting, analyzing and adapting (Appendix 4). It was perceived that the "core process stays the same but the characteristics are different due to low decision relevant data available, frequently lacking basic and advance knowledge of emerging markets amongst decision makers, a high change and dynamism in these environments resulting in a higher uncertainty for decisions and subsequently an increased entrepreneurial risk" (R9). So need for change in the process was expressed by respondents for single but also across phases (Appendix 4) with (a) balanced intelligence insight generation and usage between central and decentralized firm units (plan phase), (b) fit-to-market qualitative research approaches making use of primary sources (collect phase), (c) proactive use of data triangulation approaches combined with analysis against a validity/uncertainty result scale for transparent communication (analysis phase), (d) presentation of developed vs. emerging market deviations (adapt phase), (e) sharing cross-country or cross-segment insights (adapt phase), (f) higher degree of analyst involvement in decision making (adapt phase), (g) IT tool usage, actionable CI generation (across phase), (h) usage on all relevant organizational levels (across phase) as well as (i) analyst training for extended responsibility and task portfolio (across phase). Appendix 4 interprets modification needs against existing academic perspectives.

6. CONCLUSIONS AND BUSINESS BENEFITS

6.1 Conclusion

This study of a commercial vehicle OEM and its CI activities for EM business illuminated the in-depth understanding of CI and its constructs for CA in a not yet investigated, unique and holistic research single case setting. In the examined research setting, the potential of CI for CA was traceable (RQ1a). Moreover, intelligence as a source required for advantageous positioning in the highly product-driven commercial vehicle industry was transparent to generators and users of CI in general (RQ1b), along with, as from literature expectable (Kumar et al., 2011), diverse and ambiguously perceived limitations and influenced by seven identified factors. For the first time in academia, CI and pre-identified CI constructs were investigated in a systematic and joint research approach in this specific context. Concluding, seven out of the eight pre-identified CI (#1,2,3,4,5,6 and 8) constructs from literature were suggested to be potentially contributing to CA (RQ2a), while beyond that neither the last pre-identified construct, organizational resource allocation to intelligence activities (#7), nor any other construct's influence on CA was retrievable (RQ2b) in this study. Furthermore, two major recommendations for modification of CI products (RQ3a), and eight levers for each in literature (Gayoso & Husar, 2008), identified CI process stages of planning, collecting, analyzing and adapting for CI (RQ3b) that were retrievable for EM.

6.2 Business benefits

Despite acknowledging that no generalization is possible from this single case study, generated insights still enable firms to reflect on how to potentially achieve greater impact of CI on CA for their specific case. Benefits would arise from analyzing and improving firm-specific linkages between CA and CI and its transparencies for generators and users in general. Improving the CI setup specifically for constructs such as CI timing, CI type, organizational intelligence activity integration, communication channel through which intelligence is filtered through the organization, procedures for structured, purposeful collection of intelligence and the capability of the organization to convert information into action. Further, firms could also improve organizational attitudes to environmental change pressures on CA impact. Considering potential adaption possibilities such as the two identified for CI as a product or

the eight suggested for CI as a process gives further possibility to influence the potential of CI for CA.

7. LIMITATIONS AND AREAS FOR FUTURE RESEARCH

7.1 Limitations

As with other research, this study also has limitations. These could be based in underlying theory, since the conceptual connection of CI and CA was not undisputed (Qiu, 2008) although it is empirically supported (Adidam, Banerjee & Shukla, 2012). Furthermore, terminological heterogeneity of CI (Bisson, 2014; Grèzes, 2015) could have limited the exhaustive knowledge retrieval from the literature review. Due to the selected cross-sectional, single case study setting, research was consequently limited in regard to theory generation, and verification as well as generalization of other firms or industry settings (Rowley, 2002). Potential limitations of the data collection and analysis could have occurred as well. However, possible biases were reduced through rigorously-applied research procedures for document selection, interviewee sampling as well as strictly applied qualitative analysis.

7.2 Future research

With little “empirical work linking the impact of a firm’s CI activities on a firm’s performance” (Adidam, Banerjee & Shukla, 2012, p.242-243) in existing research, this study in a very particular case setting provided substantial further—but not an exhaustive—contribution to this knowledge gap. Hence, further in-depth or complementary particularization as demanded by Ichijo & Kohlbacher (2008) for further “formalizing... the constructs of competitive intelligence” (Saayman et al., 2008, p. 383) are obvious areas for future research. This could be done, for example, by researching in-depth in the same case a) in one CI construct only, b) in all constructs but longitudinally; or examining another complementary case c) in the same industries on the same or another value chain/system level or other cultural/national background or d) in a similar/other industry with a longitudinal timeframe. Moreover, future research could try to generalize the retrieved findings for e) one or f) all constructs in a cross-sectional/ longitudinal timeframe in a representative sample.

8. REFERENCES

- Abu Amuna, Y. M., Al Shobaki, M. J. & Abu Naser, S. S. (2017) Strategic Environmental Scanning: an Approach for Crises Management. *Information Technology & Electrical Engineering*, 6(3), 28-34.
- Adegbile, A., Sarpong, D. & Meissner, D. (2017) Strategic Foresight for Innovation Management: A Review and Research Agenda. *International Journal of Innovation and Technology Management*, 14(4), 1-34.
- Adidam, P. T., Banerjee, M. & Shukla, P. (2012) Competitive Intelligence and Firm's Performance in Emerging Markets: An Exploratory Study in India. *Journal of Business and Industrial Marketing*, 27(3), 242-254.
- Ahmadi, M., Baei, F., Hosseini-Amiri, S.-M., Moarefi, A., Suifan, T. S. & Sweis, R. (2020) Proposing a Model of Manager's Strategic Intelligence, Organization Development, and Entrepreneurial Behavior in Organizations. *Journal of Management Development*, Vol. ahead-of-print No. ahead-of-print.
- Alasuutari, P., Bickman, L. & Brannen, J. (Eds.) (2008) *The SAGE Handbook of Social Research Methods*. London (UK): Sage Publications Ltd.
- Alnoukari, M., Razouk, R. & Hanano, A. (2016) BSC-SI, A Framework for Integrating Strategic Intelligence in Corporate Strategic Management. *International Journal of Strategic Information Technology and Application*, 7(1), 1-14.
- Ansoff, H.I. (1965) *Corporate strategy: An Analytic Approach to Business Policy for Growth and Expansion*. New York (US): McGraw-Hill.
- April, K. & Bessa, J. (2006) A Critique of the Strategic CI Process within a Global Energy MNC. *Problems and Perspectives in Management*, 4(2), 86-99.
- Arcosa, R. (2016) Public Relations Strategic Intelligence: Intelligence Analysis, Communication and Influence. *Public Relations Review*, 42(2), 264-270.
- Asghari, S., Targholi, S., Kazemi, A., Shahriyari, S. & Rajabion, L. (2020) A New Conceptual Framework for Identifying the Factors Influencing the Effectiveness of Competitive Intelligence. *Competitiveness Review*, Vol. ahead-of-print, No. ahead-of-print.
- Ashton, W.B. & Stacey, G.S. (1995) Technical Intelligence in Business: Understanding Technology Threats and Opportunity. *International Journal of Technology Management*, 10(1), 79-104.
- Badr, A., Madden, E. & Wright S. (2006) The Contribution of CI to the SDM Process: Empirical Study of the European Pharmaceutical Industry. *Journal of Competitive Intelligence and Management*, 3(4), 15-35.
- Barakat, H.J., Shatnawi, H.A. & Ismail, S.T. (2016) The Role of Marketing Information Systems in Reducing the Effects of the International Financial Crisis: A Study Applied on the Banks Working in the Kingdom of Saudi Arabia from Islamic Perspective. *International Journal of Marketing Studies*, 8(1), 181-190.
- Barnea, A. (2014) Competitive Intelligence in the Defense Industry: A Perspective from Israel – A Case study analysis. *Journal of Intelligence Studies in Business*, 4(2), 91-111.
- Baxter, P. & Jack, S. (2008) Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544-559.
- Ben-Haim, Y. (2018) Positivism and its Limitations for Strategic Intelligence: A Non-Constructivist Info-Gap Critique. *Journal of Intelligence and National Security*, 33(6), 904-917.
- Beverland, M. & Lindgreen, A. (2007) Implementing Market Orientation in Industrial Firms: A Multiple Case Study. *Industrial Marketing Management*, 36(4), 430-442.
- Bisson, C. (2014) Exploring Competitive Intelligence Practices of French Local Public Agricultural Organisations. *Journal of Intelligence Studies in Business*, 4(2), 5-29.
- Bose, R. (2008) Competitive Intelligence Process and Tools for Intelligence Analysis. *Industrial Management and Data Systems*, 10(4), 510-528.
- Bowen, G. A. (2009) Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27-40.
- Brereton, P., Kitchenham, B., Budgen, D. & Li, Z. (2008) *Using a Protocol Template for Case Study Planning*. 12th International Conference on Evaluation and Assessment in

- Software Engineering (EASE). Bari (Italy): University of Bari.
- Brody, R., & Wright, S. (2008) Issues in Defining Competitive Intelligence: An Exploration. *Journal of Competitive Intelligence*, 4(3), 3-16.
- Buechner, A. G. & Mulvenna, M. D. (1998) Discovering Internet Marketing Intelligence Through Online Analytical Web Usage Mining. *ACM SIGMOD Record*, 27(4), 54-61.
- Calof, J. L. & Wright, S. (2008) Competitive Intelligence a Practitioner, Academic and Inter-Disciplinary Perspective. *European Journal of Marketing*, 42(7/8), 717-730.
- Calof, J., Mirabeau, L. & Richards, G. (2015) Towards an Environmental Awareness Model Integrating Formal And Informal Mechanisms – Lessons Learned From The Demise of Nortel. *Journal of Intelligence Studies in Business*, 5(1), 57-69.
- Case firm (2010b) *Emerging market budget segment heavy duty trucks project briefing and final presentation*. Unpublished document.
- Case firm (2011a) *Organisational charts THE CASE FIRM Sales_201106 and THE CASE FIRM Sales Marketing and Brands incl Business Intelligence_201106*. Unpublished document.
- Cepeda, G. & Martin, D. (2005) A Review of Case Studies Publishing in Management Decision: Guides and Criteria for Achieving Quality in Qualitative Research. *Management Decision*, 43(6), 851-876.
- Cerny, J. (2016) Information Needs in Competitive Technical Intelligence. *Journal of Systems Integration*, 7(1), 3-12.
- Chakraborti, S. & Dey, S. (2016) *Multi-level K-means Text Clustering Technique for Topic Identification for Competitor Intelligence*. 2016 IEEE Tenth International Conference on Research Challenges in Information Science (RCIS) - Grenoble (France), 1-10.
- Chen, E. L., Riitta, K., McDonald, R. & Eisenhardt, K. M. (2010) Life in the Fast Lane: Origins of Competitive Interaction in New vs. Established Markets. *Strategic Management Journal*, 31(13), 1527-1547.
- Civi, E. (2000) Knowledge Management as a Competitive Asset - A Review. *Marketing Intelligence and Planning*, 18(4), 166-174.
- Cuervo-Cazurra, A., Maloney, M., & Manrakhan, S. (2007) Causes of the Difficulties in Internationalization. *Journal of International Business Studies*, 38(5), 709-725.
- Colakoglu, T. (2011) The Problematic Of Competitive Intelligence: How To Evaluate& Develop Competitive Intelligence? *Procedia Social and Behavioral Sciences*, 24(2011), 1615-1623.
- Collins Stewart (2010) *Global Trucks: We've only just begun*. Collins Stewart.
- Connor, T. (2007) Market Orientation and Performance. *Strategic Management Journal*, 28(9), 957-959.
- Creswell, J. W. (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. London (UK): Sage Publications Ltd..
- Crowley, E. (2004). Market intelligence versus marketing research. *Quirks Marketing Reviews*.
<http://www.quirks.com/articles/a2004/20041209.aspx?searchID=40935096>
(Accessed: 27.07.2020).
- Datamonitor (2010) *Medium and Heavy Trucks - BRIC (Brazil, Russia, India, China) Industry Guide*. Datamonitor.
- Day, G. S. & Wensley, R. (1988) Assessing Advantage: A Framework for Diagnosing Competitive Superiority, *Journal of Marketing*, 52(2), 1-20.
- Dishman, P. L. & Calof, J. L. (2008) Competitive Intelligence a Multiphasic Precedent to Marketing Strategy. *European Journal of Marketing*, 42(7/8), 766-785.
- Dubois, A. & Gadde, L.-E. (2002) Systematic Combining: An Abductive Approach to Case Research. *Journal of Business Research*, 55(7), 553-560.
- Durand, R. (2003) Predicting a Firm's Forecasting Ability. *Strategic Management Journal*, 24(9), 821-838.
- du Toit, A. S. A (2016) Using Environmental Scanning to Collect Strategic Information: A South African Survey. *International Journal of Information Management*, 36(1), 16-24.
- Eisenhardt, K. M. & Graebner, M. E. (2007) Theory Building from Cases: Opportunities and Challenges. *Academy of Management Journal*, 50(1), 25-32.
- Easton, G. (2010) Critical Realism in Case Study Research. *Industrial Marketing Management*, 39(1), 118-128.

- El-Eid, S. (2006) *Competitive Intelligence and Its Effect on UK Banking Strategy*. Thesis (PhD), Leicester (UK): De Montfort University.
- El-Muhtaseb, H. (2018) *The Implementation of Competitor Intelligence: Conceptual Foundations and Empirical Analyses*. Munich (Germany): Rainer Hampp Verlag.
- Ezenwa, O., Stella, A. & Agu, A. O. (2018) Effect of competitive intelligence on competitive advantage in Innoson technical and industry limited, Enugu state, Nigeria. *International Journal of Business, Economics & Management*, 1(1), 26-37.
- Fahy, J. (2002) A Resource-Based Analysis of Sustainable Competitive Advantage in a Global Environment. *International Business Review*, 11(1), pp. 57-78.
- Falahata, M., Ramayah, T., Soto-Acosta, P. & Lee, Y.-Y. (2020) SMEs Internationalization: The Role of Product Innovation, Market Intelligence, Pricing and Marketing Communication Capabilities as Drivers of SMEs' International Performance. *Technological Forecasting and Social Change*, 152(2020), 1-7.
- Fatti, A. & du Toit, A.S.A. (2013) Competitive Intelligence in the South African Pharmaceutical Industry. *Journal of Intelligence Studies in Business*, 3(1), 5-14.
- Fleisher, C. S. (2008) Using Open Source Data in Developing Competitive and Marketing Intelligence. *European Journal of Marketing*, 42(7/8), 852-866.
- Fleisher, C. S., Wright, S. & Allard, H. T. (2008) The Role of Insight Teams in Integrating Diverse Marketing Information Management Techniques. *European Journal of Marketing*, 42(7/8), 836-851.
- Flyvbjerg, B. (2006) Five Misunderstandings about Case-Study Research. *Qualitative Inquiry*, 12(2), 219-245.
- Gayoso, R. W. & Husar, K. (2008) Buy-side Market Intelligence Practice: Reflections from High-Tech Manufacturing. *Competitive Intelligence*, 11(2), 26-32.
- Ghauri, P.N. & Firth, R. (2009) The formalization of case study research in international business. *der markt*, 48(1-2), 29-40.
- Ghoshal, S. & Kim, S. K. (1986) Building Effective Intelligence Systems for Competitive Advantage, *Sloan Management Review*, 28(1), 49-58.
- Glance, N., Hurst, M., Nigam, K., Siegler, M., Stockton, R. & Tomokiyo, T. (2005) *Deriving Marketing Intelligence From Online Discussion*. KDD '05: Proceedings of the 11th ACM SIGKDD International Conference on Knowledge Discovery in Data Mining, 419-428.
- Global Intelligence Alliance (2011) *Market Intelligence for the Marketing and Sales Process*. GIA Bulletin. Available at: <http://www.globalintelligence.com/insights-analysis/bulletins/functions/> (Accessed 22nd February 2012).
- Goeb, J. (2010) *Marketing Intelligence Wissen als Entscheidungsgrundlage im Marketing*. Wiesbaden (Germany): Gabler Verlage | Springer Fachmedien.
- GoldmanSachs (2007) *Global Economics Paper No: 153 The N-11: More Than an Acronym*. Goldman Sachs Economic Research.
- GoldmanSachs (2011) *It is Time to Re-define Emerging Markets*. Goldman Sachs Asset Management.
- Grèzes, V. (2015) The Definition of Competitive Intelligence Needs through a Synthesis Model. *Journal of Intelligence Studies in Business*, 5(1), 40-56.
- Hancock, D. R. & Algozzine, B. (2006) *Doing Case Study Research*. New York (US) & London (UK): Teachers College Press Columbia University.
- Hult, G. T. M., Ketchen, D. J. Jr. & Slater, S.F. (2005) Market Orientation and Performance: An Integration of Disparate Approaches. *Strategic Management Journal*, 26(12), 1173-1181.
- Kuosa, T. (2016) *The Evolution of Strategic Foresight: Navigating Public Policy Making*. New York (USA): Routledge.
- Ichijo, K. & Kohlbacher, F. (2008) Tapping Tacit Local Knowledge in Emerging Markets – The Toyota way. *Knowledge Management Research and Practice*, 6(3), 173-186.
- Iden, J., Methlie, L.B. & Christensen, G. E. (2017) The Nature of Strategic Foresight Research: A Systematic Literature Review. *Technological Forecasting and Social Change*, 116(2017), 87-97.
- Jenster, P. & Solberg Søilen, K. (2013) The Relationship between Strategic Planning and Company Performance – A Chinese

- Perspective. *Journal of Intelligence Studies in Business*, 3(1), 15-30.
- Kamya, M. T., Ntayi, J. M. & Ahiauzu, A. (2010) Knowledge Management and Competitive Advantage: The Interaction Effect of Market Orientation. *African Journal of Business Management*, 4(14), 2971-2980.
- Ketchen, D. J. Jr., Hult, G. T. M. & Slater, S. F. (2007) Toward Greater Understanding of Market Orientation and the Resource-Based View. *Strategic Management Journal*, 28(9), 961–964.
- Kern, M. (2009) *Schöne Neue Welt*. lastauto omnibus, (2009/03), 56-60.
- Koegel Trailer GmbH & Co.KG (2008) *Internationalisierung der Anhänger- und Aufbautenindustrie – die Branche im Wandel*. Koegel Trailer GmbH and Co.KG.
- Köseoglu, M. A., Mehraliyev, F., Altin, M. & Okumus, F. (2020) Competitor Intelligence And Analysis (CIA) Model And Online Reviews: Integrating Big Data Text Mining With Network Analysis For Strategic Analysis. *Tourism Review*, Vol. ahead-of-print No. ahead-of-print.
- Köseoglu, M. A., Ross, G. & Okumus, F. (2016) Competitive Intelligence Practices in Hotels. *International Journal of Hospitality Management*, 53(2016), 161-172.
- Kohli, A. K. & Jaworski, B. J. (1990) Market Orientation: The Construct, Research Propositions and Managerial Implications. *Journal of Marketing*, 54(2), 1-18.
- Kraaijenbrink, J., Spender, J.-C. and Groen, A. J. (2010) The Resource-Based View: A Review and Assessment of Its Critiques. *Journal of Management*, 36(1), 349-372.
- Kyriakopoulos, K. & Moorman, C. (2004) Tradeoffs in Marketing Exploitation and Exploration Strategies: The Overlooked Role of Market Orientation. *International Journal of Research in Marketing*, 21(3), 219-240.
- KPMG (2006) *Die europäische Nutzfahrzeugindustrie im Zeichen der Globalisierung*. KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft.
- Kumar, V., Jones, E., Venkatesan, R. & Leone, R. P. (2011) Is Market Orientation a Source of Sustainable Competitive Advantage or Simply the Cost of Competing. *Journal of Marketing*, 75(1), 6-30.
- Lee, M. & Lee, S. (2017) Identifying New Business Opportunities From Competitor Intelligence: An Integrated Use of Patent And Trademark Databases. *Technological Forecasting and Social Change*, 119(2017), 170-183.
- Leech, N. L. & Onwuegbuzie, A. J. (2007) An Array of Qualitative Data Analysis Tools: A Call for Data Analysis Triangulation. *School Psychology Quarterly*, 22(4), 557-584.
- Levine, S. S, Bernard, M. & Nagel, R. (2017) Strategic Intelligence: The Cognitive Capability to Anticipate Competitor Behavior. *Strategic Management Journal*, 38(12), 2390-2423.
- Lewis, D. (2006) Marketing Masterclass: Harnessing Intelligence for Competitive Advantage, *Journal of Medical Marketing*, 6(4), 276-281.
- London, T. & Hart, S. L. (2004) Reinventing Strategies for Emerging Markets: Beyond the Transnational Model. *Journal of International Business Studies*, 35(5), 350-370.
- McGonagle, J. J. (2016) Competitive Intelligence. *The Intelligencer: Journal of U.S. Intelligence Studies*, 22(2), 55-60.
- Mandal, P. C. (2017) Marketing Intelligence: Roles in Business Decision-Making. *International Journal of Business Forecasting and Marketing Intelligence*, 3(4), 433-441.
- Mandal, P. C. (2018) Marketing Information and Marketing Intelligence: Roles in Generating Customer Insights. *International Journal of Business Forecasting and Marketing Intelligence*, 4(3), 311-321.
- Maune, A. (2014) Competitive Intelligence as an Enabler for Firm Competitiveness: An Overview. *Journal of Governance and Regulation*, 3(2), 29-42.
- McEvily, S. K. & Chakravarthy, B. (2002) The Persistence of Knowledge-Based Advantage: An Empirical Test for Product Performance and Technological Knowledge. *Strategic Management Journal*, 23(4), 285-305.
- McKinsey & Company (2009a) *Route 2020 - The Future of the Global Truck Industry. Expert survey results*. McKinsey & Company.
- McKinsey & Company (2009b) *Route 2020 - The Future of the Global Truck Industry*. McKinsey & Company.
- McKinsey & Company (2011) *Full Speed Ahead: China Heavy Truck Market*. McKinsey &

- Company. Available at: <http://autoassembly.mckinsey.com/html/home/home.asp> (Accessed 1st June 2011).
- Miles, M.P. & Darroch, J. (2006) Large Firms, Entrepreneurial Marketing Processes, and the Cycle of Competitive Advantage. *European Journal of Marketing*, 40(5/6), 485-501.
- Momeni, A. & Mehrafzoon, M. (2013) Critical Factors of Competitive Intelligence in the Power Plant Industry: The Case Study of MAPNA Group. *Journal of Intelligence Studies in Business*, 3(1), 31-43.
- Nadkarni, S. & Barr, P. S. (2008) Environmental Context, Managerial Cognition, and Strategic Action: An Integrated View. *Strategic Management Journal*, 29(13), 1395-1427.
- Nasri, W. (2012) Conceptual Model of Strategic Benefits of Competitive Intelligence Process. *International Journal of Business and Commerce*, 1(6), 25-35.
- Ngo, L. V. & O' Cass, A. (2012) Performance Implications of Market Orientation, Marketing Resources, and Marketing Capabilities. *Journal of Marketing Management*, 28(1-2), 173-187.
- Nte, N. D., Omede, K.N., Enokie, B. K. & Bienose, O. (2020) Competitive Intelligence and Competitive Advantage in Pharmaceutical Firms in Developing Economies: A Review of Lagos State, Nigeria. *Journal of Management, economics, and Industrial Organization*, 4(1), 76-99.
- Ottesen, G. G. & Grønhaug, K. (2004) Exploring the Dynamics of Market Orientation in Turbulent Environments: A Case Study. *European Journal of Marketing*, 38(8), 956-973.
- Oubrich, M., Hakmaouia, A., Bierwolf, R. & Haddanic, M. (2018) Development of a competitive intelligence maturity model: Insights from Moroccan companies. *Journal of Intelligence Studies in Business*, 8(1), 25-36.
- PA Consulting (2010) *Strategische Partnerschaft in Russland Markteinstieg für bewährte Nutzfahrzeugfamilie in den russischen Markt*. PA Consulting Group.
- Papulovaa, Z. & Gazovaa, A. (2016) Role of Strategic Analysis in Strategic Decision-Making. *Procedia Economics and Finance*, 39(2016), 571-579.
- Peteraf, M. A. & Bergen, M. E. (2003) Scanning Dynamic Competitive Landscapes: A Market-Based and Resource-Based Framework. *Strategic Management Journal*, 24(10), 1027-1041.
- Peyrot, M., Childs, N., Van Doren, D. & Allen, K. (2002) An Empirically Based Model of Competitor Intelligence Use. *Journal of Business Research*, 55(9), 747-758.
- Pillania, R. K. (2009) Multinationals and Emerging Markets. *Business Strategy Series*, 10(2), 100-103.
- Poblano Ojinaga, E. R. (2018) Exploratory Study of Competitive Intelligence in Mexico. *Journal of Intelligence Studies in Business*, 8(2), 22-31.
- Prior, V. (2009) *Intelligence Glossary*. Available at: <http://scip.cms-plus.com/files/Prior%20Intelligence%20Glossary%202009Jan.pdf> (Accessed 27th December 2009).
- Qiu, T. (2008) Scanning for Competitive Intelligence a Managerial Perspective. *European Journal of Marketing*, 42(7/8), 814-835.
- Qu, S. Q. & Dumay, J. (2011) The Qualitative Research Interview. *Qualitative Research in Accounting and Management*, 8(3), 238-264.
- Rakthina, S., Calantone, R. J. & FengWang, J. (2016) Managing Market Intelligence: The Comparative Role of Absorptive Capacity and Market Orientation. *Journal of Business Research*, 69(12), 5569-5577.
- Roland Berger Strategy Consultants (2009a) Automotive Insights - Automotive Innovation made in BRIC. Roland Berger Strategy Consultants Automotive Competence Center. Available at: http://www.rolandberger.at/publications/publications/2009-05-19-Automotive_inSIGHT_special_01_2009.html (Accessed 01st June 2011).
- Roland Berger Strategy Consultants (2009b) Truck industry 2020: The Future is Global. Roland Berger Strategy Consultants. Available at http://www.rolandberger.com/expertise/industries/automotive/truck_manufacturers/2009-06-09-rbsc-pub-Truck_industry_2020.html (Accessed 01st June 2011).
- Rohrbeck, R., Heinrich, A. M. & Heuer, J. (2007) Strategic Foresight in Multinational Enterprises – A Case Study on the Deutsche Telekom Laboratories. *MPRA Paper 5700*, University of Munich (Germany).
- Rothberg, H. N. & Erickson, G. S. (2012) Benchmarking Competitive Intelligence

- Activity. *Journal of Intelligence Studies in Business*, 2(3), 5-11.
- Rowley, J. (2012) Conducting Research Interviews. *Management Research Review*, 35(3/4), 260-271.
- Saayman, A., Pienaar J., Pelsmacker, P. de Viviers, W., Cuyvers, L., Muller, M.-L. & Jegers, M. (2008) Competitive Intelligence: Construct Exploration, Validation and Equivalence, In: *Aslib Proceedings: New Information Perspectives*, 60(4), 83-411.
- Saddhono, K., Chin, J., Tchuykova, N. M., Qadri, M. N. and Wekke, I. S. (2019) Competitive Intelligence: Systematic Collection and Analysis of Information. *Journal of Critical Reviews*, 6(5), 155-159.
- Salvador, M. R. & Bañuelos, M. A. T. (2012) Applying Patent Analysis with Competitive Technical Intelligence: The Case of Plastics. *Journal of Intelligence Studies in Business*, 2(1), 51-58.
- Salvador, M. R. and Reyes, M. A. B. (2011) Methodology of Integration for Competitive Technical Intelligence with Blue Ocean Strategy: Application to an exotic fruit. *Journal of Intelligence Studies in Business*, 1(1), 29-39.
- Seguraab, E., Moralesab, R. & Somolinosb, J. A. (2018) A Strategic Analysis of Tidal Current Energy Conversion Systems in the European Union. *Applied Energy*, 212, 527-551.
- Seyyed Amiri, N., Shirkavand, S., Chalak, M. & Rezaeei, N. (2017) Competitive Intelligence and Developing Sustainable Competitive Advantage. *AD-minister*, 30 (January-June), 173-194.
- Shujahat, M., Hussain, S., Jared, S., Malik, M. I., Thurasamy, R. & Ali, J. (2017) Strategic Management Model with Lens of Knowledge Management and Competitive Intelligence: A review approach. *VINE Journal of Information and Knowledge Management Systems*, 47(1), 55-93.
- Solberg Søylen, K. S. (2017) Why Care About Competitive Intelligence and Market Intelligence? The Case of Ericsson and the Swedish Cellulose Company. *Journal of Intelligence Studies in Business*, 7(2), 27-39.
- Stan, M. (2017) Strategic Foresight In Intelligence. *Studia Securitatis*, 2(2), 100-109.
- Tao, Q. & Prescott, J. E. (2000) China: Competitive Intelligence Practices in an Emerging Market Environment. *Competitive Intelligence Review*, 11(4), 65-78.
- Thomas, L. G. & D'Aveni, R. (2009) The Changing Nature of Competition in the U.S. Manufacturing Sector, 1950 to 2002. *Strategic Organization*, 7(4), 387-431.
- Trim, P. R. J. (2004) The Strategic Corporate Intelligence and Transformational Marketing Model. *Marketing Intelligence and Planning*, 22(2), 240-256.
- Van Birgelen, M., de Ruyter, K. & Wetzels, M. (2000) The Impact of Incomplete Information on the Use of Marketing Research Intelligence in International Service Settings: An Experimental Study. *Journal of Research Service*, 2(4), 372-388.
- Van Wynsberghe, R. & Khan, S. (2007) Redefining Case Study. *International Journal of Qualitative Methods*, 6(2), 80-94.
- VDA (2006) *Wachstum und Chancen in der internationalen Nutzfahrzeugindustrie*, Frankfurt (Germany): VDA.
- Vissak, T. (2010) Recommendations for Using the Case Study Method in International Business Research. *The Qualitative Report*, 15(2), 370-388.
- Voola, R. & O'Cass, A. (2008) Implementing Competitive Strategies: The Role of Responsive and Proactive Market Orientations. *European Journal of Marketing*, 44(1/2), 245-266.
- Walle, A. H. (1999) From marketing research to competitive intelligence: useful generalization or loss of focus? *Management Decision*, 37(6), 519-525,
- Walsh, P. F. (2017) Improving Strategic Intelligence Analytical Practice Through Qualitative Social Research. *Journal of Intelligence and National Security*, 32(5), 548-562.
- Wright, S. (2013), Converting input to insight: organising for Intelligence-Based Competitive Advantage, pp. 1-35 in Wright, S. (Ed), *Competitive Intelligence, Analysis and Strategy: Creating Organisational Agility*. Abingdon (UK): Routledge/Taylor & Francis.
- Wright, S. & Calof, J. L. (2006) The Quest for Competitive, Business and Marketing Intelligence: A Country Comparison of Current Practice. *European Journal of Marketing*, 40(5/6), 453-465.

Yin, R.K. (2003) *Case Study Research, Design and Methods*. Newbury Park (US): Sage Publications.

Zhang, Y, Robinson, D. K. R., Porter, A.L., Zhu, D., Zhang, G. & Lu, J. (2016) Technology

Roadmapping for Competitive Technical Intelligence. *Technological Forecasting and Social Change*, 110 , 175-186.

APPENDIX

Appendix 1: Interrelating central research problem, research questions, sub-research questions and interview questions shown for research question 1 as an example. Research objectives= Research objectives in the context of emerging market business from a developed market firm perspective this study aimed. In this table, the central research problem is: What potential does competitive intelligence have to create and sustain competitive advantage in emerging market competition by exploiting an adapted process and tailored-to-fit products?

Research objectives and Research question	Sub-questions	Interview questions for the semi-structured interview guideline
<p>To ascertain the potential of CI to create and sustain CA</p> <p>1a: Can the potential of CI for CA be ascertained?</p>	<p>1a.1) Which sources (resource-/ competence-/ capability-/knowledge-based) for firm performance differences / CA in emerging markets are considered?</p> <p>1a.2) How is CI (or any synonymously/ similar term) linked in this context?</p> <p>1a.3) If a link is considered: How is it described?</p> <p>1a.4) If no link is considered: What are reasons for that?</p> <p>1a.5) If other sources are considered: Which sources are mentioned?</p> <p>1a.6) If other sources are considered: What are reasons for mentioning them?</p>	<p>B1) What is your understanding of a Competitive Advantage a firm holds?</p> <p>B2a) Which Competitive Advantage do you believe a Commercial vehicle OEM needs to hold in the industry by now?</p> <p>B2b) Which Competitive Advantage do you believe a Commercial vehicle OEM needs to hold in 5 to 10 year?</p> <p>B3a) Which Competitive Advantage do you believe THE CASE FIRM holds by now?</p> <p>B3b) Which Competitive Advantage do you believe THE CASE FIRM needs to hold in 5 to 10 year?</p> <p>B4a) Which sources of CA at THE CASE FIRM do you identify?</p> <p>B4b) [If knowledge/data/information/ intelligence of the external environment is not named]: How about CA by knowledge of external environment?</p> <p>C1a) When coming to emerging market competition: Which Competitive Advantage do you believe a Commercial vehicle OEM needs to hold in the industry by now?</p> <p>C1b) When coming to emerging market competition: Which Competitive Advantage do you believe a Commercial vehicle OEM needs to hold in the industry in 5 to 10 years?</p> <p>C2a) When coming to emerging market competition: Which Competitive Advantage do you believe THE CASE FIRM inhibits by now?</p> <p>C2b) When coming to emerging market competition: Which Competitive Advantage do you believe THE CASE FIRM needs to inhibit in 5 to 10 year?</p> <p>C3a) Which sources of CA for emerging market at THE CASE FIRM do you identify?</p> <p>C3b) [If knowledge/data/information/ intelligence of the external environment is not named]: How about CA by knowledge of external environment?</p> <p>D1) Which Character do BI results have according to your opinion?</p> <p><input type="checkbox"/> Nice to know</p> <p><input type="checkbox"/> Important to know</p> <p><input type="checkbox"/> Decision critical</p> <p><input type="checkbox"/> CA relevant insights</p> <p><input type="checkbox"/> Other</p>
<p>To clarify how transparent the potential link between CI and the creation of CA is for generators and users of CI.</p> <p>1b: How transparent is the potential of CI for CA for generators and users of CI?</p>	<p>1b.1) Is a link between CI (or any synonymously/ similar term) and firm performance differences/ CA considered?</p>	<p>D2a) Is CI explicitly used to create Competitive Advantage for emerging market competition? Who is aware of link of CI and Competitive Advantage and uses it explicitly?</p> <p>D2b) Does in your opinion the company retrieve and absorb actionable knowledge and transfer it to activities meaning a temporary or sustainable Competitive Advantage for the Emerging Market business of the firm?</p> <p>D2c) If so, which Competitive Advantage for emerging market competition are suggested to be achieved by CI?</p> <p>D2d) How does this link look like for emerging market competition: intelligence as a whole (elements of it) embedded process wise in product development, business/functional strategy development? How is CI embedded?</p> <p>D2e) If the link how Competitive Intelligence as a process and a product can be managed to create and/or sustain Competitive Advantage in emerging market competition is non-existent in the case company: Why is this the case? What needs to be changed to link CI and Competitive Advantage?</p> <p>E1) What is the perception since when the company uses Competitive Intelligence in the case firm?</p> <p>E2) What is the initial trigger/ reason for implementation of Competitive Intelligence in the case firm (initial target, today's target)? What did change with emerging market competition?</p>

	<p>E3) Where (at which levels, where in the organisation) is Competitive Intelligence created? Is all part of the external strategic analysis explicitly done by Competitive Intelligence department? If not, where else does the information come from-how, by whom and why is it there created? Were any amendments made for emerging market competition?</p> <p>E4) How is the BI department organized in regard of organisational structure, division of labour, mission and vision, aims and objectives, processes, ...? Were any amendments made for emerging market competition?</p> <p>E5) How is intelligence in general and for emerging market competition process and process-stage-wise (Plan-, collect- and data source-, analysis- and dissemination-wise) generated?</p> <p>E6) Which kind of information is collected in the BI department in general? What kind of knowledge tries the company to build on emerging market (as the growth promising perspective) in regard of the Macro- and Microenvironment?</p> <p>E7) At what organisational levels, where and by whom is Competitive Intelligence for emerging market competition used? What happens with the generated information and how is it used?</p>
--	--

Appendix 2: Biographical interview background data and sampling criteria. CV = commercial vehicles.

Criteria for purposive sampling		Interviewee number								
		#1	#2	#3	#4	#5	#6	#7	#8	#9
Case firm int. expert	v (>=10)	x	x	x	x	x	x	x	x	x
Case firm ext. expert	v (>=5)									
Industry	v (CVI or related to CVI and case firm)	CV	CV	CV	CV	CV	CV	CV	CV	CV
Dept.	-	Business Strategy Dept	Business Strategy Dept	Product Strategy Dept	Product Strategy Dept	Sales Dept	Sales Dept	Project Management Office	Strategy and Planning Dept	BI Dept
Position	V (>=Expert)	Senior consultant new business segments	Senior Consultant Multi Brand Strategy and Globalisation	Head of Business Foresight Commercial vehicles	Senior product strategy developer Global Trucks	Sales Manager External Engines Off highway	Business Developer Emerging Market Projects	Program Manager Light Vehicles	Head of Strategy and Planning Southern Africa	Senior Manager
Professional expertise in industry (in years)	v (>=three)	five	six	four	six	five	six	five	ten	five
Work focus on EM in %	v (>=50)	70	80	60	70	60	100	60	100	50
Relationship to CI	v User (U) / generator (G)	U	U	G and U	G and U	U	U	G and U	G and U	G and U
Anticipated Understanding of CI	V CI as process/product to create business environment insights	advanced	advanced	advanced	advanced	adequate	advanced	adequate	adequate	top
Anticipated degree of CI usage	-	high	high	high	high	Low/medium	high	Low/medium	medium	high
Anticipated preference on potential sources for firm performance differences	v 50:50 share of KBV vs CBV	CBV	CBV	KBV/CBV	CBV	CBV	(CBV)/KBV	CBV	(CBV)/KBV	(CBV)/KBV

Criteria for purposive sampling		Interviewee number								
		#10	#11	#12	#13	#14	#15	#16	#17	#18
Case firm int. expert	v (>=10)	x								
Case firm ext. expert	v (>=5)		x	x	x	x	x	x	x	
Industry	v (CVI or related to CVI and case firm)	CV	CV	CV	CV (competitor firm 2)	CV (competitor firm 1)	Automotive consultancy	Intelligence Research Service provider 1	Intelligence Research Service provider 2	Intelligence Research Service provider 3
Dept.	-	BI Dept	BI Dept	BI Dept	BI Dept	Business Strategy	Automotive practice	Automotive practice	Automotive practice	Automotive practice
Position	v (>=Expert)	Head of market and competitor analysis truck and bus	Head of market research	Analyst for emerging market CIS and India	Market Analyst	Senior Consultant	Manager	Global Director	Managing Partner	Manager
Professional expertise in industry (in years)	v (>=three)	five	three	five	nine	three	eight	ten	twelve	ten
Work focus on EM in %	v (>=50)	50	60	100	60	60	70	50	60	60
Relationship to CI	v User (U) / generator (G)	G and U	G and U	G and U	G and U	G and U	U	G	G	G
Anticipated Understanding of CI	v CI as process/product to create business environment insights	top	top	top	top	top	advanced	top	top	top
Anticipated degree of CI usage	-	high	high	high	high	high	Medium/high	high	high	high
Anticipated preference on potential sources for firm performance differences	v 50:50 share of KBV vs CBV	KBV	KBV	KBV	KBV	CBV	CBV/ (KBV)	(CBV)/ KBV	KBV	KBV

Appendix 3: Created understanding on CA relevant CI constructs.

CI constructs	Key Insights from study data	Created Understanding in this study
Intelligence timing	<p>Support for construct: <i>“ faster and more in time delivery of intelligence would be accounted as helpful”</i> for CA (R6, 12), <i>“ continuity and a long-term [oriented] intelligence scope”</i> were also suggest to impact CA (R6). Reluctant support for constructs contribution for CA: Construct might be <i>“ less important than the other [constructs]”</i> (R17). Rejection of constructs support for CA <i>“ really [not] seeing relevance, not even in emerging markets”</i> (R5) underlining that the <i>“ the commercial vehicle industry and commercial engine industry is due to long product cycles not involved in hyper-competition business environment”</i>.</p>	<p>The study supported from the case setting the demand for a frequency and timing of CI which is adapted to the competitiveness of the firm specific environment. Timely strategic responses to changes in the environment to outperform competitors in the quest for CA was confirmable from the selected case. Thus, doubts on whether in turbulent, volatile and high velocity environment speedy responses could build a sustainable CA at all were also understood from the selected case. However, individual perception of environmental and competitive pressure still suggested that increasing speed and frequency of insight availability could support CA creation.</p>
Intelligence type	<p>Support for construct: <i>“ type of intelligence [is] retrieved as highly relevant”</i> (R12), limiting it to <i>“ actionable knowledge”</i> for CA relevance (R17), Reluctant support for constructs contribution for CA: Experts felt unsecure regarding the supporting potential of that very construct in the light of others (R15) Rejection of constructs support for CA: Perception that <i>“ rare knowledge is not existing for this industry”</i> (R10)</p>	<p>Actionability respectively usability and relevance of intelligence was understood as potentially CA relevant. Quality, type, accuracy, up-to-dateness, depth and comprehensiveness were in the case setting for emerging market business identified CA and performance relevant properties of the intelligence type. However, the perception in the case on whether intelligence as non-substitutable, rare, valuable and inimitable, complex and firm specific as well as tacit - rarely available and accessible -knowledge as a source of CA is retrievable at all in the commercial vehicle industry, provided a valuable criticism of the supportive position on that construct.</p>
Organisational intelligence activity integration	<p>Support for construct: <i>“ for CA, involvement [of CI] in the strategy process is very important”</i> (R17), <i>“ CA most likely created in central functions which sees the company in its wholeness”</i> (R11), Reluctant support for constructs contribution for CA: Activity integration is a relevant matter but rather a prerequisite of CA than determining it (R16) No impact seen since other constructs more clearly determining CA (R7, R10)</p>	<p>It could be shown, that organisational activity integration of CI is also potentially perceived as CA relevant. However, the opinions on which organisational level CI unfolds its influence best ranged from all organisational levels to corporate level only. Furthermore it was demanded that CI needs to be closely linked to decision making to unfold impact on CA. Thus, ambiguous positions or clear rejections showed that individual experiences and perspectives on emerging markets vary the perception of a constructs significantly.</p>

CI constructs	Key Insights from study data	Created Understanding in this study
<p>Communicati on channel through which intelligence is filtered through the organization (intelligence dissemination)</p>	<p>Support for construct: “ Channel most critical” (R3) but communication must be effective and efficient: and “ the best channel is depending on several variables such as the topic/level of demanded detail, on established formalistic or less formalized processes, on people (and their proactive attitude towards knowledge), on individual competences as well as positions and functions in the organization” (R9), intelligence “ results need direct access to top management without being filtered (R11) Ambiguous perception on CA impact “ most effective and efficient channel for each CI task” hard if not unrealistic to be found (R10)</p>	<p>For the <i>Communication channel through which intelligence is filtered through the organization</i> construct the data presented a potential impact on CA. This underlined the findings from Adidam, Banerjee and Shukla (2012, p.249) saying that “ disseminating intelligence across the firm is one of the most critical components of effective competitive intelligence” – as the study data showed in particular for emerging market business. Organising more effective and efficient channel of intelligence collection and dissemination by reduction of process barriers connecting CI closer to decision making, reduction of number of involved stakeholders, real-time insight access and by IT tools is understood as supportive for CA impact. However, the potential impact on CA was also criticised for the challenging quest establishing an ideal channel in complex organisations.</p>
<p>Structured, purposeful collection intelligence The capability of the organization to convert information into action</p>	<p>Both constructs relevant One group of respondents believed that both constructs influence CA relevance of CI (R1, 11, 13, 14, 15, 17) Conversion capability as more relevant construct “ the ability to convert... to action is key” (R13), “ collection is important but the capability might be an outstanding asset” (R2) and “ plays a more important role than sheer collection and analysis of intelligence” (R3) since “ unique knowledge in this industry is rare and success is more depending on how quick the insights can be converted into action by experience and talent” (R9).</p>	<p>On the <i>structured, purposeful collection of intelligence and the capability of the organization to convert information into action</i> construct this study contributed diverse knowledge. On one hand both constructs were believed as influencing CA relevance of CI. Also in existing research sourcing of intelligence in emerging market context was identified as a significant challenge for organisations. On the other hand experts considered the capability of the organization to convert information into action as the only relevant Competitive Intelligence construct in regard to CA impact out of the two discussed. In their view intelligence was regarded as a necessary but not sufficient prerequisite for Competitive Advantage. This supported a viewpoint in existing academic research in which “ developing a competitive advantage requires appropriate [organizational] capabilities” (Kamya et al., 2010, p.2978; Adidam, Banerjee and Shukla, 2012) and in which the capability of the organization to convert information into action is understood as a key enabler for an advantageous position of firms in their industry.</p>

CI constructs	Key Insights from study data	Created Understanding in this study
<p>Organisational attitude to environmental change pressures</p>	<p>Support for construct: In an emerging market business context “ continuity and a long-term holistic intelligence scope impact CA relevance” (R6) Respondents believed furthermore, that in particular in emerging market business organisational awareness for change in attitude towards a greater outside in perspective is required to harvest the potential of CI best (R8). It was claimed that through all hierarchical levels, from supervisory board, management board to each single member of staff a change of attitude towards Market Orientation on individual level is an essential prerequisite for successful CI exploitation (R8, R16).</p>	<p>The <i>organisational attitude to environmental change pressures</i> construct was also identified as potentially CA relevant. Individual Market Orientation attitude was expressed as an essential prerequisite. For emerging market business organisational awareness for change in attitude, culture as well as skills towards a greater outside-in perspective seemed to support the potential of CI.</p>
<p>Others</p>	<p>-</p>	<p>On further constructs potentially impacting CA no additional construct was retrieved. It was only concludable from the retrieved data that CI constructs most likely cannot be applied solely to unfold impact towards CA. It is suggestable that CI constructs should be joined and integrated in a holistic Competitive Intelligence approach to unfold significant impact on CA.</p>

Appendix 4: CI process phase modification needs for EM business.

Single CI Cycle Phase	Single phase modification needs identified from findings	Finding critically assessed against existing academic perspectives	Interpretation and Conclusion from the researcher	Across phase modification needs identified from findings	Finding critically assessed against existing academic	Interpretation and Conclusion from the researcher
Plan Phase	Balanced intelligence insight usage between central and decentral firm units	Dispersed distribution planning (Rothberg and Erickson, 2012): Decentral intelligence to be well linked to firms' regional/ central headquarter (Lasserre, 1993; Du Toit and Muller, 2004; Ichijo and Kohlbacher, 2008; Hoppe, 2013).	To overcome the challenge of lacking market insights knowledge creation and sharing practises between central and decentral units are required to be established, however organisational structures are frequently a barrier for an open and timel exchange.	Optimize channelling of generation, dissemination and responsiveness by an IT tool	IT supported CI tool for the full intelligence cycle allows more effective and efficient processing but more importantly accessing the intelligence generated (Barnea (2014).	Effective and efficient dissemination of intelligence via an IT Tool can foster its usage increasing also intelligence credibility when access to raw data/analys is made possible.
	Fit-to-market qualitative research approaches	Rather qualitative than quantitative approaches to emerging markets proposed as success factor (Tao and Prescott, 2000).	Qualitative research approaches in emerging markets rather seem to bridge cultural inacceptance of quantitative survey designs in (for example in Arabian countries or in markets where the number of experts is not large enough representing a population suited for survey design).		“ Internal procedures guaranteeing the two- sided flow of information from external and internal sources and making intelligence available to those who need it to accomplish their assignments” act as a key success factor for CI (Barnea, 2014, p.105)	In noted turbulent and volatile emerging markets a holistic CI generation and dissemination approach seems to deliver the most promising results, however questioning business efficiency.
Collect phase	Fit-to-market primary source bases	Rather primary source (personal contact) based (Tao and Prescott, 2000; Adidam, Banerjee and Shukla, 2012) than secondary data based research approaches (Lasserre, 1993; Wee and Zafar, 1999) suitable for EM.	Missing or lacking reliability of statistics in emerging markets seem to be a reason to rely rather on direct contact to market experts (customers, association members, analysts,...) => really allow understanding the markets.	Generate and use CI at all relevant central and local organisational levels		

Single CI Cycle Phase	Single phase modification needs identified from findings	Finding critically assessed against existing perspectives	Interpretation and Conclusion from the researcher	Across phase modification needs identified from findings	Finding critically assessed against existing	Interpretation and Conclusion from the researcher
Analysis phase	Proactive use of data triangulation approaches	Triangulation of different sources to increase reliability and insight depth (Tao and Prescott, 2000).	Different sources in emerging markets are suggested to be required to overcome lacking completeness, accuracy and reliability of secondary data; however taking also in consideration that opinions of	Prepare analysts for the specialisation degree and an extensions of the analysts task, product and		Specialisation of analysts along emerging market relevant criteria (countries, segments,...) can potentially increase intelligence effectiveness and efficiency by overcoming complexity.
	Analyze against a validity/ uncertainty result scale for transparent communication	* TAR* framework suggested: Timeliness, Accuracy and Reliability of intelligence (Tao and Prescott, 2000, p.74).	Intelligence users which are mainly experienced in developed market intelligence might be over-confident when accessing intelligence results of emerging markets without a proactive stated reliability judgement.	Optimize actionability of CI activities	The organisational conversion capability at the end of intelligence cycle suggested as key to	Actionability of intelligence as result of analysis is perceived as vital for CA which is a cross phase procedure of the CI cycle.
Adapt phase	Presentation of developed vs. emerging market deviations		Demanded for cross-emerging/ developed or cross-segment market comparison point to the need for to developed markets contextualised support for understanding			
	Sharing of cross-country or cross-segment insights		However, it is questionable whether this contrasting presentation style is a long-term solution in a globalised world. Increasing emerging market			
	Higher degree of analyst involvement in decision making	Organisational activity integration of CI in decision making (Tao and Prescott, 2000; Du Toit and Müller, 2004; Ichijo and Kohlbacher, 2008).	Integrating CI analysts in decision making sounds promising to increase informed decisions, however it binds additional capacities and demands for different capabilities.			