The indirect effect of online marketing capabilities on the international performance of e-commerce SMEs

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ABSTRACT

International e-commerce is a strong global trend pushed by a tail wind of bolstering economic policies, changing customer behaviors, and improved logistics and technologies. This study investigates the reasons for performance variations among international e-commerce SMEs. Building on the capabilities perspective and market orientation literature, a research model is developed and tested with linear regression and mediation analysis on an effective sample of 99 Swedish SMEs which use e-commerce as an international sales channel. Our study shows that online marketing capabilities are necessary but not sufficient to increase performance among these companies. Our results show that marketing ambidexterity, reflected by both market-driven and market-driving approaches, is instrumental to leverage the effect of online marketing capabilities.

1. Introduction

While classical process models on internationalization highlight the importance of physical presence in foreign markets to overcome liabilities, acquire knowledge, and increase performance (Johanson & Vahlne, 1977), more recent research (Tolstoy, Jonsson, & Sharma, 2016) and industry reports (DHL Express, 2016) emphasize that e-commerce, i.e. digital market presence, can be a strong vehicle for international growth among small and medium sized enterprises (SMEs). International e-commerce is coming of age, bolstered by new consumer behaviors and large-scale political efforts aimed at creating well-functioning digital markets through supporting infrastructures and regulations, e.g. the EU Digital Single Market (European Parliament, 2020) and China’s Belt and Road Economic Zone (Yang, Fu, & Wang, 2017).

For SMEs to be able to leverage these favorable conditions, they need to develop relevant digital capabilities. These capabilities can be used to interpret market signals and develop technical solutions that support international e-commerce (Tolstoy, Nordman, Hänell, & Ozbek, 2020; Weber, 1999). It may not be a viable strategic option for SMEs to interpret market signals and develop technical solutions that support international e-commerce by themselves (Tolstoy et al. 2020). By efficiently mobilizing digital capabilities, SMEs are not only able to access market intelligence but can also more accurately process relevant data. This is essential for a responsive strategy design, allowing SMEs to navigate through the competition and adapt value offerings to customers in multiple foreign markets. Based on research that highlights the importance of capabilities for the performance of resource-constrained companies (Cavusgil & Knight, 2015; Pinho & Prange, 2016; Prange & Verdier, 2011), scholars have identified the online marketing capability (OMC) as a particularly important characteristic for digital companies (Thomas, 2009; Xia & Zhang, 2010). The OMC-concept refers to a company’s capacity to use Internet resources for implementing and scaling marketing activities online. While recognizing the relevance of OMC, research has, however, not explained how this specific capability relates to international performance (Hult & Ketchen, 2001).

Empirical research has underscored a company’s market orientation as one of the most strategically important variables underlying business performance (Menguc & Auh, 2006; Morgan, Vorhies, & Mason, 2009). While the market orientation of a company could be based on either a market-driven a market-driving approach (Jaworski, Kohli, & Sahay, 2000), companies with ambidextrous market orientations, that feature both market-driven and market-driving behaviors in parallel, are found...
to make more efficient use of current resources and are also better equipped to cope with market contingencies (Burton, O’Reilly, & Bidwell, 2012; Ho, Osiyevsky, Agarwal, & Reza, 2020; Hsu, Lien, & Chen, 2013; Parida, Lahtı, & Wincent, 2016). Such companies are thus able to operate on a broader strategic spectrum by both being able to explore for new opportunities and exploit existing ones. Market-driving behavior has, generally, been described as the effort to make competition irrelevant by changing the rules of the game at either the institutional or industrial level (Ghauri, Wang, Elg, & Rosendo-Ríos, 2016; Jaworski et al., 2000). In this respect, the concept is pertinent to large companies that are in possession of substantial resources that can have a profound impact on markets. With this study, however, we extend the scope of the concept, arguing that market-driving can also be a strategic option for SMEs to drive business development at the customer level. We propose that SMEs can use market-driving to create a position for themselves in the minds of consumers in different international market settings.

By using OMCs ambidextrously, SMEs can serve dual strategic purposes, i.e. both to optimize interactions with extant customers and to develop new customer relationships in dormant customer segments. As such, they make better use of their, allegedly, frugal resources. When applied effectively, OMCs can lead to the development of novel online customer experiences for internationally dispersed customer segments (i.e. GymShark). OMCs can also be used by SMEs to identify niched offerings which enable them to tackle the competition of dominating digital marketplaces. In this vein, the purpose of the study is to examine the effect that OMCs have on international performance among SMEs engaged in international e-commerce and how this effect is conditioned by marketing ambidexterity.

Our study is expected to provide two principal contributions. Firstly, we investigate the relevance of applying a capabilities perspective to explain international performance among SMEs engaged in international e-commerce. In specific, we suggest that OMC is important for these companies to tackle marketing challenges and navigate in the online environment. Secondly, by putting capabilities in a broader strategy context, we create a model where market-driven and market-driving orientations are suggested to mediate the effect that OMCs have on international performance. This suggestion is based on the idea that the OMC which operates through dual market orientations creates a more unique and efficient resource bundling which, in turn, drives international performance.

In the following section, we discuss the theoretical underpinnings of this study and develop arguments for the hypotheses. This is followed by a description of our data collection and methodology approach. Thereafter, we present our results before discussing our key contributions and managerial implications more in-depth. Limitations and future research directions are presented at the end.

2. Theoretical underpinnings and hypothesis development

2.1. Empirical studies on the e-commerce development of international SMEs

E-commerce has, as aforementioned, been identified as an important sales channel for international companies because it provides access to a new customer base and new revenue streams. Extant studies on the topic rely on multiple perspectives to investigate the exploitation of Internet-based sales activities and the exploration of prerequisites for successful international e-commerce. In a study of U.S. e-commerce companies, Luo, Hongxin Zhao, and Du (2005) find that international experiences and marketing capabilities positively influence the speed of market entry. In a similar vein, Thomas (2009) uses the capabilities perspective to examine a sample of 603 SMEs in different industries, showing that online capabilities are particularly important for small companies that need to establish a market position. The study suggests that SMEs should focus on relational online capabilities (e.g. nurturing relationships with customers) rather than merely investing in transactional capabilities (e.g. conversion and order fulfillment), thus emphasizing the importance of close relationships with customers in the electronic marketplace. Similarly, Glavas, Mathews, and Bianchi (2017) use data from 208 Australian entrepreneurial companies to analyze the role of international opportunity recognition, and highlight the relationship between Internet-related resources, capabilities, and international market performance.

A recent case study by Tolstoy et al. (2020) highlights that global digital markets are dominated by large companies. To compete with these MNCs, SMEs need to develop digital capabilities that allow them to experiment with cost-efficient internationalisation alternatives, create online solutions that resonate with market niches, and develop iterative business models (Tolstoy et al., 2020). Digital marketing campaigns are easier to adapt to smaller pools of customers, since well-defined customer segments are likely to respond better to niched offers and campaigns. Digital capabilities are, therefore, important for SMEs that want to create particular market-niches and separate their offers from the mass-market actors.

Even though previous studies have suggested that a relationship exists between companies’ capabilities to develop online business and performance, research on the specific effect of OMC on the international performance of SMEs engaged in e-commerce has not been examined in detail. One exception is Xia and Zhang’s (2010) study which shows a positive correlation between online-channel capability and companies’ performance in the retail context. However, their study does not investigate how the effect of the OMC on international performance is framed by market orientations and strategies. In sum, there is a noteworthy lack of empirical research about international e-commerce of SMEs in general (Hånell, Rovira Nordman, Tolstoy, & Ozbek, 2019; Hutchinson & Quinn, 2012) and the drivers of performance in this area in particular.

2.2. The effect of online marketing capability on international performance

Capabilities are manifested in routines and refer to a set of skills that companies use to perform specific tasks and achieve their goals (Helfat & Peteraf, 2003; Teece, Pisano, & Shuen, 1997). Empirical studies have identified different capabilities that promote SMEs’ international business development (Sternad, Jaeger, & Staubmann, 2013). SMEs use their available resources to develop capabilities that ultimately provide value to companies and strengthen their competitiveness. When engaging in e-commerce sales activities, SMEs may develop OMCs to enhance digital interfaces, digital customer experiences, and digital customer services.

The Internet is, unto itself, a resource. It aids the removal of geographical barriers by enabling individuals to share information freely. The Internet has, moreover, provided companies with the possibility to interact with foreign customers and conduct sales without setting up physical stores or having to rely on intermediaries. From a global marketing perspective, the Internet is an important marketing tool that contains vast potential for international business (Bianchi & Mathews, 2016). In particular, the Internet can accelerate companies’ international expansion by lowering transaction costs (Lohrke, Franklin, & Frownefelter-Lohrke, 2006) and facilitate cross-border communication (Mathews, Bianchi, Perks, Chen, & Glavas, 2015). The Internet has also functioned as an equalizer of international business, providing a platform for resource-constrained SMEs to expand their activities (Arnott & Bridgewater, 2002).

Although the Internet has provided new strategic options for SMEs, it is not a rare nor an inimitable resource. Through the use of specific capabilities, companies can, however, leverage the Internet to develop business and maximize the value of their resources (Luo, Kiekkä, & Ma, 2009). In general, capabilities are not bought but made (Teece, 2007). Each company has its own way to develop skills that can be hard to replicate. When developing competences and heuristics related to e-commerce, companies cultivate practices, mental schemata, and
inter-functional interactions which eventually feed into their OMCs. The complex nature and situational character of these capabilities make them unique and, thus, difficult to transfer and imitate. Arnott and Bridgewater (2002) argue that international SMEs often have lean organizations and specific skill-sets that make them flexible and particularly attentive to customers’ changing needs, thus enabling them to develop more appealing online solutions than larger companies.

SMEs often rely on distributors or platform-based marketplaces (e.g., Amazon) to reach foreign markets (Hänell et al., 2019). Even though this practice can help companies overcome the liability of foreignness (Zaheer, 1995), it prevents them from primary learning about customer needs and preferences. Internet shopping has paved a new path for SMEs to connect with foreign customers and, thereby, acquire knowledge about them. Connecting with customers online may allow SMEs to speed up their internationalization processes and become less dependent on third party distribution channels. Building on the findings by Xia and up their internationalization processes and become less dependent on

SMEs provide companies the opportunity to more quickly absorb and systemize market segments (Sinkovics & Sinkovics, 2013). E-commerce channels enable companies to more quickly absorb and systemize signals and adapt their accessible resources to customers.

ommerce operations (Stoian, Dimitratos, & Plakoyiannaki, 2019).

A pure market-driven approach can, however, have considerable drawbacks resulting in failure to ensure sustained competitiveness (Johnson, Lee, Saini, & Grohmann, 2003). For example, market-driven companies could fall into the “competency trap” where they rely on their available resources and neglect the potential of exploring the latent needs (Levinthal & March, 1993).

In contrast to a market-driven orientation, a market-driving orientation takes long-term considerations into account. A market-driving orientation is, in this study, considered to be the effort to explore future opportunities and to shape market behaviors. This is different from merely adapting to the extant competitive landscape (Jaworski et al., 2000; Kumar, Scheer, & Kotler, 2000). The increasing competition in consumer markets and the abundance of market offerings is likely to overwhelm customers (Leppälä-Nilsson et al., 2015). To become relevant in such a market, companies may need to create space for themselves by effectuating change through the creation of new market segments and product categories, shaping perceptions, engaging customers, combining resources in unexpected ways, and offering novel experiences (Wiltbank, Dew, Read, & Saravathy, 2006).

The market-driving orientation can allow internationally oriented companies to position themselves in the minds of customers by igniting and satisfying latent needs (Carrillat, Jaramillo, & Locander, 2004; Ghauri et al., 2011). For large companies, market-driving can alter customer preferences, re-configure distribution channels, and shape public policy and discourse (Ghauri et al., 2016). Because smaller companies usually do not possess the same leverage as MNEs to shape markets, market-driving is arguably delimited to the customer-oriented activities. Market-driving behaviors by SMEs may, thus, serve to breathe life into latent market niches and shape customer behaviors rather than disrupting and changing the economic order of markets. While market-driving behavior can be viewed as progressive and forward looking, it has also been associated with an inclination to avoid dealing with present problems, such as fierce competition (Ghauri et al., 2011).

Market-driving companies, hence, may fall into the “learning trap” (Levinthal & March, 1993), where they spend too much time learning about business opportunities and experimenting with alternatives while not effectively exploiting current business opportunities.

As such, market-driven and market-driving orientations can be argued to manifest different facets of the marketing ambidexterity concept. Whereas a market-driven orientation (exploitation) is less risky, more efficient and more certain, a market-driving orientation (exploration) may advance the company through the creation of unexpected value to customers (March, 1991). By combining these orientations in their internationalization strategies, companies achieve benefits from the inherent synergistic effect between the two activities, which help them to increase profitability both in the short-term and in the long-term (Hsu et al., 2013; Ireland & Webb, 2007; Länsiluoto et al., 2019; Li et al., 2008; Prange & Verdier, 2011; Wang & Li, 2008). Appreciating the complementary nature of market-driven and market-driving orientations, we argue that an ambidextrous approach will improve SMEs’ e-commerce operations (Stoian, Dimitratos, & Plakoyiannaki, 2018).

Ambidextrous companies may be able to purposefully use OMCs in ways that cover a broad strategic continuum. On the one hand, market-driven orientations enable companies to act on current opportunities related to e-commerce by e.g. analyzing sales figures, customer behaviors, and online conversion rates. This could lead to the development of online features and promotions directed to extant customers, which increases profitability in the short run. On the other hand, market-driving orientations enable companies to exert their OMCs for more long-term strategic purposes, e.g. by altering the value proposition through enhancement of the online customer experience. This can be done through the development of social media campaigns, interactive platforms where brand associations are co-constructed, content marketing, A/B-testing, and continual (predominantly content-based) search engine optimization.
The deliberate and systematic entwinement of both market-driven and market-driving orientations is here argued to enable SMEs to avoid falling in either the “competency trap” or the “learning trap”. Building on these ideas we suggest that these orientations respectively mediate the effect of the OMC on international performance.

**H2a.** Market-driven orientation partially mediates the effect that online marketing capability has on international performance.

**H2b.** Market-driving orientation partially mediates the effect that online marketing capability has on international performance.

In short, based on the capabilities perspective and the strategic management literature, we propose that OMC is likely to have a positive effect on international performance. We also examine the mediating roles that market-driven and market-driving orientations play for such an effect. Our proposed conceptual model is outlined in Fig. 1.

### 3. Methodology

In this study we use survey data to investigate the hypothesized model. The data is analyzed by mediation analysis. This approach is suitable for confirmatory analysis of theory and for testing complex causal structures. A questionnaire was collected from Swedish retailing SMEs with international sales. The questionnaire-items are developed through a three stage process: (1) a literature review of international business research (especially about international retail companies), (2) a review of international-oriented questions from previous questionnaires (see: Eriksson, Johanson, Majkgård, and Sharma (1997); Hånell, Nordman, Tolstoy, and Sharma (2018)), and (3) a literature review that identified new research issues concerning e-commerce and international knowledge acquisition in SMEs.

Based on the themes and research questions that were discussed in the literature reviews, a qualitative and longitudinal case study project was conducted (building on archival data and face-to-face interviews with founders and managers) in five internationalizing SMEs in the retail industry. The respondents were interviewed in depth about challenges and opportunities they faced in their companies’ internationalization processes. Based on what was said in the interviews, new questions for the questionnaire were created that could better capture real-life business processes. A strength of the questionnaire is, thus, that it is based on input from both theory and practice.

To test the questionnaire, two of the retail SMEs (from the longitudinal case study project) were visited. The respondents filled in the questionnaire, commenting on how they understood the questions. The feedback received led to modifications in the questionnaire to ensure that the respondents could understand all questions. Similar to previously mentioned questionnaire-questions (e.g. Eriksson et al., 1997; Hånell et al., 2018), the questionnaire-questions build on perceptive measures. The respondents were instructed to answer questions about their engagements in important foreign markets, specifically focusing on their online strategies. Most survey items were measured on a five-point item scale, with ratings ranging from low (1) to high (5).

#### 3.1. Sampling and data collection

In this study, all Swedish SME were targeted that met the following three formal criteria: (1) at least 5% of their turnover was generated from export sales; (2) the company had between 5 and 250 employees (European Commission definition); (3) They were organized under the SNI industry code 47 (i.e. containing Swedish retail businesses except for motor vehicles and motorcycles). Because e-commerce in different settings are signified by various characteristics it is beneficial to focus on a specific industry to disentangle the covariation of characteristics, and enable constancy and comparability across the collected data material.

Our reason for focusing on the retail-industry is that the digital transition and the importance of e-commerce is particularly pronounced in this industry (Tolstoy et al., 2020). The retail-industry is, moreover, characterized by increasing competition (Leppälä-Nilsson et al., 2015), which pressures SMEs to upgrade their capabilities to stay competitive.

By using the set criteria, data with information about 334 companies from different parts in Sweden was bought from Statistics Sweden’s Business Register. Thereby, we got access to some information about all Swedish retail companies that fitted these criteria. The next step was to go over the information from these companies to determine their suitability for the study. Because we only wanted to target companies with timely insights about the Swedish retail-industry, we decided to only include companies that had Swedish head-offices. Because we only wanted to target active companies, we decided to exclude companies that were dormant (e.g. companies that did not report any recent turnover), and companies that were in reconstruction-processes or in bankruptcy-processes. After this reduction 278 companies remained as potential respondents.

The study used a single key informant approach, which is common in marketing research (Phillips, 1981). The research group aimed at targeting the person in each company that had the best knowledge about the company’s international marketing strategy, (i.e., the person responsible for driving export sales). We identified these key-informants by studying the companies’ homepages and LinkedIn-pages. The persons that had this strategic role in the companies differed. In smaller companies, the responsibility for international marketing usually fell on the CEO or the marketing manager. In larger companies, foreign sales directors, online export managers and other variations of these roles were targeted. We used the contact information on the companies’ webpages to get the email address to the targeted respondents. When no contact
4. Data analysis

We use mediation analysis to test the direct and indirect effects of OMC, market-driven orientation and market-driving orientation on international performance. Data was analyzed by using the software Statistical Package for Social Sciences (IBM SPSS version 25). For the mediation analysis we also used the PROCESSmacro (version 2.16.3) developed by Hayes (2013). Mediation is assessed by examining the indirect effect of X (the independent variable) on Y (the dependent variable) through M (the mediating variable). This effect may be significant regardless of the significance of the direct effect (the effect of X on Y) and the total effect (the effect on Y when both X and M are set as predictors). As Memon, Hwa, Ramayah, Ting, and Chuah (2018) point out, mediation analysis is an increasingly used method in several fields of research that can be applied to unravel the mechanisms underlying certain causal relationships and enable scholars to develop theory.

### Table 1: Correlation matrix.

|     | 1. On_cap | 2. Mark_driven | 3. Mark_driving | 4. Int_perf | 5. Age | 6. Size | 7. Int_online |
|-----|-----------|----------------|-----------------|------------|--------|---------|-------------|
| 1. On_cap | 0         | 0.269**        | 0.493**         | 0.561      | 0      | 0.122   | 0.192       |
| 2. Mark_driven | 0         | 0              | 0.125           | 0.115      | -0.12  | 0.038   | 0.125       |
| 3. Mark_driving | 0         | 0              | 0.16            | 0.07       | 2.55   | 0.03    | 0.125       |
| 4. Int_perf | 0         | 0              | 0.532**         | 0          | 1.93   | 0.115   | 0.125       |
| 5. Age | -0.222*   | -0.082         | 0.16            | 0.038      | 0      | 0.115   | 0.125       |
| 6. Size | 0.122     | 0.117          | 0.07            | 0.03       | 23.53  | 0       | 0.115       |
| 7. Int_online | 0.192     | 0.12           | 0.125           | 0.115      | 0      | 0       | 0.125       |

* significant at the 0.01-level; ** significant at the 0.05-level (two-tailed). Mean values are presented on the upper diagonal.

information was provided on the webpages, the companies were contacted via the telephone to get the correct email address.

The questionnaire was distributed via the online survey platform qualtrics in several rounds during 2018. During the first data collection round, we sent the invitation to participate in the study (and the link to the questionnaire) to the targeted respondents via email. This mail also explained the purpose of the project and that we ensured confidentiality (to increase the likelihood that the respondents would answer questions truthfully). We also offered the respondents a reward in the shape of lottery tickets. We only managed to collect 36 responses after the first round. During the second round we contacted the key respondents via the phone and via Linkedin to ask them to participate. This led to a final response rate of 122 companies (with 99 complete and 23 partially answered questionnaires). Thus, the total response rate is 44%, which compares favorably with comparable studies in this field. Based on this data we created an effective sample containing 99 companies to ensure robust analysis.

Even though many contacted respondents opted not to participate (mainly due to a lack of time and interest) the response rate is deemed to be sufficiently high for the purpose of this project. Because non-response bias is always a concern, the research group has compared the secondary data from the Statistics Sweden Business Register between responding and non-responding companies. No significant differences were detected between these two groups of companies regarding size, location and level of internationalization. Non-response bias is, therefore, unlikely to be problematic when interpreting the findings of the quantitative study. Additional analyses of the responding companies revealed that there is a large variation in the products and services that they provide, even though they all operate in the retail sector (a sector that includes clothing, accessories, furniture and interior decorations, miscellaneous, electronics and appliances). Half of the companies are between 11 and 20 years of age and most of them (nearly 80%) have been involved in international business for more than 5 years when the questionnaire was distributed. Noticeably about 50% of the responding companies use a combination of online channels and partnerships, revealing that these companies often diversify their sales channels to pursue international markets. Moreover, 73% of the companies manage their own e-commerce websites. On average, approximately one third of the total e-commerce revenue stream comes from foreign markets and international sales accounts for 44% of their total business. That said, international activities play an important role for the performance of these companies. The constructs of OMC, market-driven orientation and market-driving orientation are measured based on the previously mentioned five-item scales and are self-reported by the investigated companies.

4.1. Measures

The study includes one independent variable, two mediating variables, and one dependent variable. All variables are factors that include at least four items. The factors are reflective, meaning that they all mirror a higher order concept and that they, for this reason, are expected to correlate with each other. As the correlation matrix shows, however, no independent variables or mediators have a higher correlation coefficient than 0.5 which is a first sign of discriminant validity. This is further substantiated by our validity and reliability tests. Worth noting in the correlation matrix is that older (younger) companies seem negatively (positively) related to an OMC. This substantiates the notion that companies using digital sales channels are not burdened by the legacy of old (e.g. non-digital) business models (Monaghan, Tippmann, & Covello, 2020).

The independent variable in the study is represented by the measure of OMC. While there are no established scales to capture this concept, we relied on conceptualizations in recent case-studies, highlighting companies’ capabilities to reconcile technological capacities with marketing skills. To be able to do this, the focus on customer online experience, user experience, and continual harvesting and processing of customer data have been argued to be instrumental (Hänell et al., 2019). The indicators are relative in the sense that respondents were urged to compare their capabilities with those of competitors. The rationale behind this operationalization is to create a tangible point of reference for respondents to relate their ratings to (Dess & Robinson, 1984).

The mediators of the study are represented by the measures market-driven orientation and market-driving orientation. Firstly, a market-driven strategy is akin to concepts such as marketing orientation and is therefore captured by a five-item measure adapted from the scale of Deshpande & Farley (1998), focusing on companies’ efforts to satisfy customers based on their extant preferences.

Secondly, a market-driving orientation implies creating and/or shaping customer preferences, societal functions, and market channels which calls for a proactive and forward-looking approach. Because our study is conducted in an SME setting where companies may lack resources to exert society-wide impact, market-driving is delimited to customer activities. We adopted a parsimonious set of five key items of
Measures.

| Factor                        | Items                                                                 | Cronbach's Alpha | CR       | AVE  |
|------------------------------|----------------------------------------------------------------------|-----------------|----------|------|
| Online marketing capability  | How do you compare with competitors regarding how you perform in the following areas in foreign markets? | 0.905           | 0.905    | 0.679|
|                              | - Search engine optimization                                       |                 |          |      |
|                              | - Identify business opportunities related to e-commerce             |                 |          |      |
|                              | - Analysis of customer data                                        |                 |          |      |
|                              | - Improvements of user experience on the website                    |                 |          |      |
|                              | - Adapt to trends related to e-commerce                             |                 |          |      |
|                              | - Develop the competence of your co-workers in e-commerce            |                 |          |      |
| Market-driven orientation    | How well do the following statements fit in with how you operate in foreign markets? | 0.716           | 0.85     | 0.535|
|                              | - We constantly evaluate our ability to meet our customers' expectations. |                 |          |      |
|                              | - Our strategy to create competitive advantages is to meet our customers' expressed needs. |                 |          |      |
|                              | - We measure customer satisfaction systematically and frequently.    |                 |          |      |
|                              | - We are more customer oriented than our competitors.               |                 |          |      |
|                              | - Customer satisfaction is central for us to achieve our business objectives. |                 |          |      |
| Market-driving orientation   | How well do the following statements fit in with how you operate in foreign markets? | 0.832           | 0.882    | 0.62 |
|                              | - We try to discover needs amongst customers which they are not yet aware of themselves. |                 |          |      |
|                              | - We look for business opportunities in areas where customers find it hard to express their needs. |                 |          |      |
|                              | - We analyze trends in our industry to be able to anticipate customers' future needs. |                 |          |      |
|                              | - We assist customers to become aware of the product- and service-needs that they will have in the future. |                 |          |      |
|                              | - We, ourselves, try to drive the development of trends in our business area. |                 |          |      |
| International performance    | The past two years our business in foreign markets has developed favorably (compared to competitors) regarding: | 0.927           | 0.948    | 0.821|
|                              | - Profitability growth                                             |                 |          |      |
|                              | - Growth of market share                                           |                 |          |      |
|                              | - Sales growth                                                     |                 |          |      |
|                              | - Return on investments                                            |                 |          |      |

Table 3 Mediation analysis.

| Direct effects | Coefficient (standard error) | Lower CI | Upper CI | Significant? |
|----------------|------------------------------|----------|----------|--------------|
| Online_cap     | 0.1149 (0.0815)              | -0.0469  | 0.2768   | 0.1618       |
| Mark_drive     | 0.2727** (0.0949)            | 0.08842  | 0.4612   | 0.05         |
| Mark driving   | 0.4079** (0.0922)            | 0.2249   | 0.5910   | 0            |
| Mediating effects | Coefficient Lower CI Upper CI Significant? | | | |
| Mark_driving   | 0.0709                      | 0.0164   | 0.1728   | Yes**        |
| Mark_driven    | 0.0954                      | 0.0112   | 0.2102   | Yes*         |

* significant at the 0.01-level
** significant at the 0.05-level (two-tailed)

the customer-driving scale developed by Ghauri et al. (2016).

The dependent variable is international performance. We ascribe to the view of Wiklund & Shepherd (2005), claiming that performance is multidimensional in nature which makes it advantageous to include different dimensions of performance measures. To cover different aspects of performance, we combined measures of financial performance and growth.

While we could not get access to secondary data related to international performance, the measure is based on self-reported assessments regarding ROI, sales growth, profitability growth, and revenue growth. These are common performance indicators used in empirical studies in the field of international business (Shoham, 1998). Growth measures and profitability measures are appropriate since they level the playing field between larger and smaller companies, giving a direct account of the effectiveness of international operations (Shoham, 1998). The use of primary data for measuring international performance is particularly appropriate when the researcher is aiming to capture the interpretation of an organization’s performance goals by managers. Hence, primary data measures performance where it matters to managers (Brouthers, 2013).

Finally, the control variables included in the study were company size (number of employees), company duration in foreign markets (measured on a four-item categorical scale: 1 = <5 years; 2 = 6–10 years; 3 = 11–20 years; >20years), and international online sales ratio (share of international online sales in relation to total international sales). Effects on the dependent variables were studied in a regression model along with the effects of the independent variable and mediating variables. The effects of the control variables were found to be insignificant, perhaps as a result of the relatively homogenous sample. For parsimonious reasons the control variables were, therefore, not included in the mediation analysis.

4.2. Reliability and validity of measures

We examined the composite reliability and validity of the measurement scales related to the four factors in this study. Composite reliability represents the shared variance among a set of observed indicators measuring an underlying factor (Fornell & Larcker, 1981). All composite reliability values and Cronbach’s alpha coefficients exceed the cut-off point level of 0.7 and AVE for all constructs is satisfactory (>0.5) (Bagoszi & Yi, 1988). Discriminant validity indicates the extent to which a given construct differs from other factors. Discriminant validity was assessed by using the Fornell-Larcker criterion. The Fornell and Larcker (1981) test supported the discriminant validity of the variables as the average variance extracted (AVE) values for all constructs exceeded 0.5, and the AVE values were greater than the highest squared correlations among constructs. Furthermore, the reliability was supported as all the indicator loadings for all variables were statistically significant (p < 0.01) and exceeded the recommended composite reliability threshold of 0.70 as shown in Table 2.
4.3. Common method variance

As recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003) and Chang, van Witteloostuijn, and Eden (2010), preventative (ex-ante) measures were taken to avoid common method variance. For example, measures were captured by different scales. We divided the survey into different sections where we varied the question type (e.g., open-ended text, dichotomous, multiple choice, rank order, multiple choice matrix) as well as used different scales and anchor labels. This prevents respondents to perceive questions similarly and use their answers for one question as reference when answering subsequent questions (Podsakoff, MacKenzie, & Podsakoff, 2012). We also checked for common method variance by using ex post measures in our analysis. The analytical method based on mediation analysis can alleviate problems of common method variance because it creates relationships among the dependent and independent variables that are complex enough to not be part of the individual rater’s cognitive maps (Chang et al., 2010). We also conducted a series of ex post tests to check for common method variance. Firstly, we conducted a principal component analysis test to check for systematic measurement errors. When conducting this test, four components emerged with an eigenvalue over 1; together, they represented 67% of the total variance. The largest component did not explain the majority of the total variance (35%), which would have been a sign of a systematic measurement error. Second, a Harman’s single-factor and a marker variable test were applied. The Harman test revealed that the measures showed insufficient fit. In addition, a marker variable test – checking the effect of a theoretically unrelated item – was also favorable to our analysis because the marker variable had an insignificant effect on the dependent variable when inserted as an additional mediator in a model. These results indicate that common method variance does not pose a serious threat to the validity of the results. Because we could not get access to any international performance measures from an objective source (e.g., financial) we had to rely on single source data. To check the viability of this data we ran post hoc tests where we checked the correlation between international sales growth (survey data) and general sales growth (objective financial data). The correlation was positive (0.124), albeit insignificant at the 5-percent level. The insignificance could either be a type I error or due to different units of analysis (performance related to international business in the company and the total performance of the company).

4.4. Analysis

The analysis is based on a bootstrapping procedure which enables more robust results while it mitigates potential negative effects of relatively small sample sizes (which could be claimed to be the case in this study). Specifically, bias-corrected bootstrapping is considered a powerful method to detect mediation. A statistically significant indirect effect (two-tailed, p < 0.05) should be taken as an evidence for mediation (Preacher & Hayes, 2004). Additionally, evaluating confidence intervals is an important condition to confirm a mediation effect. If the confidence interval for the indirect effect does not straddle a zero in between, this supports the presence of a mediation effect. The bootstrapping procedure used a resample of 5000, and both the 95% and the 99% bias-corrected bootstrap confidence intervals of the indirect effects (Preacher & Hayes, 2008). Apart from mediation effects, Hypothesis 1 suggested a direct effect between OMC and international performance. As exhibited in Table 3, this direct effect, however, is not found significant which means that Hypothesis 1 is rejected. Although not a part of our theorizing, it is worth noting that the investigated mediators have discrete direct effects on international performance ($B_{mark\_driven} = 0.2727$; $B_{mark\_driving} = 0.4079$).

Concerning the hypothesized mediation effects, Table 3 shows that the values of the 95% bias-corrected bootstrap confidence interval did not straddle a 0 in between, indicating the presence of mediation. The significance was further confirmed with a Sobel-test, which supported the significance of the mediation ($Z_{mark\_driven} = 1.89$; $Z_{mark\_driving} = 2.02$). To confirm that it is a partial or full mediation, the variance accounted for (VAF) index was computed to determine the size of the indirect effects in relation to the total effect (which also includes the direct effects of the mediators). The resulting value (VAF) of 25% (for market-driven orientation) respectively 34% (for market-driving orientation), which is within the range of 20–80%, implying a partial mediation. Notably, the meaningfulness of trying to distinguish between full versus partial mediation has been debated. Contemporary literature (Hayes & Rockwood, 2016; Rucker, Preacher, Tormala, & Petty, 2011) claims that all mediation effects in social sciences studies are bound to be more or less partial, implying that interpretations of these effects should be taken with caution. Full mediation implies that a researcher has completely explained the process by which X influences Y and no additional research is needed to search for further mediators (Hayes & Rockwood, 2016). To achieve full mediation, one would have to include all possible mediators and suppressors in the model and measure them without error.

Based on our estimations, it can be concluded that both market-driven and market-driving orientations mediate the relationship between OMC and international performance within the empirical context of this study, thus supporting Hypothesis 2a and Hypothesis 2b. While the sizes of the mediation effects are relatively small, the merit of a mediation analysis largely lies in its innate capacity to verify the significance of a causal structure. The results clarify the nature of the relationship between the OMC and international performance. Furthermore, the total effects-size of mediators on international performance is of substantial magnitude, indicating that the model holds substantial explanatory power. The small size of effects could also be supported theoretically. SMEs are known to operate by using effectuation logic, building on the entrepreneurial skills of founders (Wilbank et al., 2006). Entrepreneurs thus play important roles in providing their companies with strategic direction from the start. However, when companies mature and continue their geographical expansion, the entrepreneurs’ knowledge of new markets and complex market operations increase and develop their entrepreneurial orientation. This may lead to the development of unique capabilities that foster the performance of companies which may explain the small but significant results of the mediating effects in our model. The theoretical and practical implications of these effects will be discussed in the following section.

5. Discussion and conclusion

The age of information technology has enhanced the possibilities of a rapid international engagement of SMEs. Taking the importance of international e-commerce as a sales channel for retail SMEs (Colton, Roth, & Bearden, 2010; Tolstoy et al., 2016) and the necessity to investigate the effect of contextually specific capabilities on companies’ performance into account (Bianchi & Mathews, 2016; Mathews et al., 2015; Sernad et al., 2013; Thomas, 2009; Xia & Zhang, 2010), we examined how OMC, when put into a theoretically complex model with marketing ambidexterity, can explain the performance variations among e-commerce SMEs. The marketing ambidexterity, in this study, is argued to be activated by both market-driven and market-driving orientations.

We started off by testing the effect of OMC on international performance using a sample of Swedish retail SMEs. In contrast to previous studies (Thomas, 2009; Xia & Zhang, 2010), we discerned no direct relationship between the OMC and international performance within the realm of the multivariate model. This result implies that the OMC cannot alone be placed as a predictor for the performance of international e-commerce SMEs. We proceeded further to explore other complementary factors which could give the directionality necessary to embed value from the OMC in international e-commerce settings.

Extant research has also posited that it is not the capabilities per se but the interaction between capabilities and other internal strategic factors (in this study, the market orientations) that results in superior
performance (Menguc & Auh, 2006; Morgan et al., 2009). However, the mechanism of how capabilities interplay with market orientations is still largely left unexplored. We, therefore, created a model stipulating that the effect of the OMC has on international performance operates through ambidexterity, here mirrored by the paired mediation of market-driven and market-driving orientations. The cornerstone for our hypotheses is the widely accepted ambidexterity - performance paradigm where companies address the tension between exploitation and exploration to stay competitive both in the short-term and in the long run (Ho et al., 2020; Hsu et al., 2013; Ireland & Webb, 2007; Parida et al., 2016; Prange & Verdier, 2011). While a market-driven orientation allows companies to exploit transactional opportunities by staying close to their customers, a market-driving approach acts to prevent them from exploiting the same wants and needs. Instead, market-driving companies are expected to explore latent demands and use them to develop an unique market position. Marketing ambidexterity tensions could be resolved by the synergistic effect between market-driven and market-driving orientations (Armario, Ruiz, & Armario, 2008; Hooley et al., 2000; Lanshuo et al., 2019).

Our model reveals that market-driven and market-driving orientations indeed have strong direct effects on international performance (which is in and of itself a prerequisite for mediation). Besides this, the variables operate as mediators in the relationship between the OMC and international performance, thus offering strong explanation power in the realm of the model. The reason why the effect of the OMC operates through the marketing ambidexterity variables (e.g. market-driving and market-driven orientation) could be that these strategic aptitudes enable companies to specify purposes, directions, and boundaries in how to utilize their capabilities related to digital business. The development of capabilities is not an one-off activity but rather a continual process through the marketing ambidexterity variables (e.g. market-driving and market-driven orientation) could be that these strategic aptitudes enable companies to specify purposes, directions, and boundaries in how to utilize their capabilities related to digital business. The development of capabilities is not an one-off activity but rather a continual process where the accumulation and internalization of market knowledge and heuristics occur. In such a way, the unique aspect of the OMC is formed and becomes companies’ competitive edge. The exertion of the OMCs thus needs to be put in a context where these capabilities either can be leveraged for business efficiency (market-driven) or for developing new business (market-driving).

Interestingly, the market-driving orientation has a considerably stronger direct effect than the market-driven orientation. This finding aligns with current research in showing that market-driving strategies create sustainable competitive advantage by providing customers with superior and unique benefits (Ghauri et al., 2011, 2016). Although extant literature has demonstrated that companies pursuing both orientations typically achieve better performance in terms of profitability and growth, it might be more advantageous to use market-driving approaches in the turbulent and fast changing environments that international new ventures and born globals have to deal with when they internationalize (Ghauri et al., 2011; Pinho & Orange, 2016). Furthermore, while the effects of market-driving behaviors have been empirically verified in large business settings, i.e. among MNEs, there is a lack of studies about these effects in the context of SMEs. SMEs, plausibly, have less leverage than MNEs to drive markets by exerting society-wide and industry-wide impact (as demonstrated in the study by Ghauri et al. (2016)). This study, however, shows that SMEs can drive markets at the customer-level. In specific, a market-driving strategy can help SMEs to manage international digital business operations by proactively igniting engagement among key customers and drive the development of new market niches.

5.1. Theoretical contribution

Theory development about the specific capabilities required for business development in international digital markets is highly relevant. Building on Thomas (2009) and Xia and Zhang (2010), we find that the OMC allows companies to develop viable commercial solutions in the online business environment where customers’ experiences and behaviors are different from physical stores. The study thus contributes to research by providing conceptual and empirical validation of the OMC-concept in the context of SMEs that engage in international e-commerce. The OMC is likely to be particularly important for resource-constrained SMEs that need to tackle global competition by maintaining digital flexibility, adapt to changing markets, and create unique online customer experiences in niche markets.

Our analysis posits that the OMC needs the framing of marketing ambidexterity to be accurately applied. Besides showing that market-driven and market-driving orientations are themselves drivers of international performance, the model shows that these two market orientations serve as mediators for companies’ capabilities, specifically for transmitting the effect that the OMC has on international performance. This means that the competency of the OMC should be built on an ambidextrous marketing philosophy to enhance efficiency in current operations (i.e. market-driven) and to expand business in new areas (i.e. market-driving). Variations in performance among international SMEs that are involved in e-commerce, can be explained by the circumstance that some OMCs are bundled with dual market orientations.

Hence, our findings contribute to research on SMEs that are engaged in international e-commerce by introducing a marketing strategy perspective that can explain the development of capabilities that are required to succeed in the digital environment. This framework could, plausibly, also have external validity and be relevant for adjacent areas related to international business and digitalization. The implications of this study are both theoretical and practical. The marketing perspective that we have theorized and empirically verified can be used to explain the international expansion of e-commerce SMEs. Furthermore, the study implies that to succeed internationally, SMEs need to focus on both dormant and extant customer needs in parallel. In specific, ambidextrous companies operate on a broader strategic spectrum and are therefore likely to achieve better performance (Kyriakopoulos & Moorman, 2004; Lewin & Volberda, 1999). Companies that are not sufficiently market-driven can miss out on opportunities to pick low hanging fruit, e.g. increasing their turnover by extending their product offerings to existing customer segments in foreign markets.

Companies that are not sufficiently market-driving, however, may fail to expand their offerings beyond their current markets (e.g. which would result in a weak market positioning and modest paybacks from international e-commerce investments). Being small players, SMEs are unlikely to disrupt existing market structures. Instead, they thrive in the niches that are neglected by large incumbents. By demonstrating the impact that the market-driving orientation has on international performance among SMEs that are engaged in cross-border e-commerce, we argue that technology-savvy SMEs should be able to adapt their offerings and steer away from mass-markets. From this perspective, market-driving behaviours of SMEs are predominately captured at the micro level (customers) rather than at the macro level (industry and society) as in the case of large companies. As such, we make an additional empirical contribution to the extant literature, where market-driving orientation primarily has been regarded to be an MNE-specific trait and predominately has been tested on samples of large companies.

However, inherent tension exists in the pursuit of ambidexterity (March, 1991). It is more challenging for resource-constrained SMEs to be ambidextrous in comparison to large corporations. E-commerce is a viable solution for these SMEs to be both market-driven and market-driving because it comes with the possibilities to overcome both temporal and spatial barriers (Yamin & Sinkovics, 2006). E-commerce technology allows a cost-efficient sales channel with great scope for tailor-made customer experiences. The technology, unto itself, can be used to increase efforts in explorative practices and thereby open up avenues for new business creation. For instance, e-commerce saves time and effort when processing orders, communicating with customers, and producing reports, which allows more time for market analytics and exploring the dormant needs. Based on this notion, we argue that theory development related to marketing practices of digital businesses is highly warranted in the international business field.
5.2. Managerial relevance

In the wake of the Covid-19 pandemic, e-commerce has become even more important as companies have shifted their business models to comply with the “social distancing rules”. Even though strict rules are likely to be revoked as the pandemic subsides, customers’ online shopping behaviors might linger, creating a new normal with a new sales logic. International e-commerce provides substantial opportunities for companies wishing to tap into this general trend. In the process of developing international e-commerce, business models need to be comprehensively redesigned involving value chains, operational processes and routines - all of which demand specific capabilities. One important capability is, for example, to be able to utilize online analytics to detect dormant customer preferences in specific foreign markets. Another important capability is to be able to position brands in the minds of consumers. In sum, SMEs need to develop and sharpen their OMCs in order to be successful with e-commerce.

The findings of this study imply that the sharpening of a retail company’s OMC is an on-going process. One reason for this is that retail markets are characterized by intensive competition and that new retail concepts often drown in the noise. Retail managers cannot afford to focus just on managing market-driven approaches, but must also commit to market-driving approaches to stay ahead. A market-driving approach can enable a retail SME to gain traction in foreign markets, shape customer demand, and transform e-commerce into a core part of their business models. The findings of this study emphasize how important it is for managers to realize that their strategic choices can either open up or close opportunities directly related to international business performance.

6. Limitations

This study has several limitations. First, the study is based on a relatively small data sample (consisting of 99 Swedish retail SMEs). However, since Sweden is a small country (in terms of both population and market size), this sample size can be considered to be representative for the country’s retail sector. Moreover, problems pertaining to size are also alleviated by the bootstrapping method used in this study. Additionally, companies from small and remotely located economies will normally be more outward looking, due to the smallness of the local market which often makes it difficult for these companies to scale up their business. Therefore, a study of Sweden’s retail-sector provides a valuable example for the study of OMCs.

A second limitation with this study is that the measurement-scales rely on the perceptions of CEOs and senior managers. A risk with using perceptive measures is that a manager may overrate, for example, his own company’s performance in comparison to other companies. Future studies should move beyond collecting ratings from the same common rater (see: Podsakoff et al., 2003) and make greater use of objective data or multi-source performance ratings to produce more valid estimates of the relationship between OMC and international performance.

To corroborate the results of this study, future studies could also analyze larger samples from bigger economies. To unravel the details and micro foundations of ambidextrous e-commerce processes, explorative case study research would be useful. We thus recommend researchers to probe deeper into this interesting phenomenon, both in the context of domestic business and international business.

Our study specifically focuses on the retail sector to introduce a strategic perspective which gives a detailed account of the specific effects of OMC and marketing ambidexterity. Future research can extend the context to unfold more aspects of the OMC and ambidexterity concepts.

Lastly, we recognize that the concept of OMC is novel and has not been extensively examined or tested in the past. This study constitutes an early attempt at theorizing around the OMC-concept and testing it empirically. We find this concept intriguing because of its practical relevance for businesses and theoretical relevance for enriching strategy frameworks. We welcome researchers in all facets of e-commerce research to contribute with studies that theoretically underpin the concept and explore its effects on companies’ behaviors.

Declaration of interest

None.

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Appendix

See appendix Table 1, Table 2, Table 3.

References

Apiah Adu, K. (1998). Market orientation and performance: empirical tests in a transition economy. Journal of Strategic Marketing, 6(1), 25–45.
Armario, J. M., Ruiz, D. M., & Armario, E. M. (2006). Market orientation and internationalization in small and medium-sized enterprises. Journal of Small Business Management, 46(4), 485–511.
Arnott, D. C., & Bridgewater, S. (2002). Internet, interaction and implications for marketing. Marketing Intelligence & Planning, 20(2), 86–95.
Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. Journal of the Academy of Marketing Science, 16(1), 74–94.
Blanchard, C., & Mathews, S. (2016). Internet marketing and export market growth in Chile. Journal of business research, 69(2), 426–434.
Brouthers, K. D. (2013). Institutional, cultural and transaction cost influences on entry mode choice and performance. Journal of International Business Studies, 44(1), 1–13.
Burton, M. D., O’Reilly, C. A., & Bidwell, M. J. (2012). Management systems for exploration and exploitation. ATLA Summary of Proceedings, 2012(21), 11809.
Carrillat, F. A., Jaramillo, F., & Locander, W. B. (2004). Market-driving organizations: a framework. Academy of Marketing Science Review, 5(5), 1–14.
Cavugolu, S. T., & Knight, G. (2015). The born global firm: an entrepreneurial and capabilities perspective on early and rapid internationalization. Journal of International Business Studies, 46(1), 3–16.
Chang, S.-J., van Witteloostuijn, A., & Eden, L. (2010). From the editors: common method variance in international business research. Journal of International Business Studies, 41(2), 178–184.
Colton, D. A., Roth, M. S., & Bearden, W. O. (2010). Drivers of international e-tail performance: the complexities of orientations and resources. Journal of International Marketing, 18(1), 1–22.
Deshpande, R., & Farley, J. U. (1998). Measuring market orientation: generalization and synthesis. Journal of Market-Focused Management, 2(3), 213–232.
Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit: summary. Strategic Management Journal, 5(3), 265–273.
Douglas, S. P., & Craig, C. S. (2011). Convergence and divergence: developing a semiglobal marketing strategy. Journal of International Marketing, 19(1), 82–101.
Erikkson, K., Johansson, J., Malmqvist, A., & Sharma, D. D. (1997). Experiential knowledge and costs in the internationalization process. Journal of International Business Studies, 28(2/3), 337–360.
European Parliament. (2020). How to Fully Reap the Benefits of the Internal Market for E-Commerce? Luxembourg: European Parliament.
Express, D. H. L. (2016). The 21st Century Spice Trade: A Guide to the Cross-Border E-commerce Opportunity. Germany: DHL Express.
Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. Journal of Marketing Research, 18(3), 382–388.
Ghauri, P. N., Elg, U., Tarnovskaya, V., & Wang, F. (2011). Developing a market-driving strategy for foreign markets: internal capabilities and external activities. Schmalenbach Business Review, 63(5), 1–23.
Ghauri, P. N., Wang, F., Elg, U., & Rosendo-Ríos, V. (2016). Market driving strategies beyond localization. Journal of business research, 69(12), 5682–5693.
Glavan, C., Mathews, S., & Blanchard, C. (2017). International opportunity recognition as a critical component for leveraging Internet capabilities and international market performance. Journal of International Entrepreneurship, 15(1), 1–35.
Hänell, S. M., Nordman, E. R., Tolstoy, D., & Sharma, D. D. (2018). Pursuing innovation: an investigation of the foreign business relationships of Swedish SMEs. British Journal of Management, 29(4), 817–834.
