Master Thesis – Preliminary

Introduction

To which degree do entrepreneurs listen to the needs of the consumers during the development of their business idea? To which extent do they monitor the moves of their competitors and the rest of the external environment they operate in? We hypothesize that entrepreneurs are prone to 'fall in love' with their idea and do not spend the necessary resources on marketing research in the early stages. In this phase, resources are scarce and entrepreneurs must make careful investment considerations. In this study, we want to investigate the role of a company's market orientation in innovation and entrepreneurial endeavors, more specifically in startups. To do so, we look at how market orientation affects success in new ventures. Additionally, we investigate how capabilities within analytics moderate the effects marketing orientation has on performance.

Market orientation as a philosophy has received a lot of attention over the last decades. Narver and Slater (1990) and Jaworski and Kohli (1990) popularized the term, and it has since been subject to heated discussions among researchers. There seems to exist a common agreement that market orientation is the extent to which firms gather, analyze and utilize information about their external environment when making strategic decisions, and the positive effect this process has on success (Narver and Slater 1990, 1994, 1995; Kohli and Jaworski 1990, 1993; Pelham, 2000; Hult, Ketchen and Slater, 2000; Agarwal, Krishna Erramilli and Dev 2003; Han, Kim and Srivastava 1998). There are three main antecedents to a market orientation; top management commitment, interdepartmental dynamics (degree of conflict and connectedness) and organizational structures and systems (Kohli and Jaworski, 1993). When a firm is market oriented, it brings the focus and efforts of individuals together, which then may lead to superior performance (Kohli and Jaworski, 1990).

Within this topic, surprisingly little attention have been given to startups. Startups have a high failure rate (Baum and Silverman 2000; Furr and Ahlstrom 2011; McGrath 1999) and we hope to gain valuable insight into why this rate is so high by investigating market orientation in startups. Shedding light on this linkage may have important implications on how an entrepreneur should build the business from the very beginning to increase the performance of the startup. This research is important for entrepreneurs in the future as a guideline on whether to invest more in marketing and analytical capabilities to achieve success. If adopting a market orientation early on proves to affect the success of startups, it might alter the way entrepreneurs start building new ventures in the future.

An interesting element in this discussion is the emergence of new opportunities in marketing analytics. Technology has made information more readily available, presenting many opportunities in terms of marketing analytics and big data analytics. In line with this development, it is plausible that digital marketing analytics will become increasingly important. Scholars have already found a positive effect of digital marketing analytics capabilities on firm performance (Germann, Lilien and Rangaswamy 2013; Wedel and

Kannan 2016; Xu, Frankwick and Ramirez 2016). However, research also find that professionals are concerned with the effectiveness of digital customer analytics, making them reluctant to invest in it (Germann et al. 2014; Kayande et al. 2009). Managers not jumping on the bandwagon of new methods and techniques is an old issue. John Little described this phenomenon nearly 50 years ago: "The big problem with ... models is that managers practically never use them. There have been a few applications, of course, but the practice is a pallid picture of the promise" (Little 1970, p. 466). In this study, we investigate if entrepreneurs, who are supposed to be innovative, are equally reluctant to invest in digital customer analytics and the potential impact digital marketing analytics have on the success of startups.

Literature review

Firm size and startups

The discussion on how size affects the ability to innovate is an old debate (Harrison 1994), which has been thoroughly discussed by academics. In fact, it has become the second largest body of empirical literature in the field of industrial organization (Cohen, 1995). Acs and Audretsch (1988) discovered that the level of innovation differed between large and small firms in different technological and economic environments. Several other academics have added to this discussion over the years, to the point where we can safely conclude that innovation in small firms differs from innovation in larger firms, depending on a multitude of factors (e.g. Audretsch 2001; Cohen and Klepper 1992; Eden, Levitas and Martinez 1997; Nieto and Santamaría 2010; Tether 1998).

Market orientation has been identified as a prominent variable in the relationship between innovation and performance in small and large firms (Agarwal, Krishna Erramilli and Dev 2003; Han, Kim and Srivastava 1998; Hult, Ketchen and Slater 2005; Kirca, Jayachandran and Bearden 2005; Appiah-Adu 1998; Baker and Sinkula 2009; Pelham 2000; Pelham and Wilson 1995). Verhees and Meulenberg (2004) discovered that the innovativeness of the owner, which by their definition also is the manager, is particularly important in smaller firms, having a positive influence on market orientation, innovation and performance. Both large and small firms can increase their performance by focusing on their market orientation, however, there is still one type of firm that has not yet received much attention - startups. The role of market orientation in the early years of a company is a topic that is relatively uncovered by the current body of literature. It seems that scholars are satisfied with researching small firms and not specifically look into startups. We argue that even if startups almost exclusively belong to the category 'small firms', it does not necessarily mean that the theories of small firms are generalizable to startups. There is no widely accepted definition of 'small firms', thus, many definitions used in previous research resonate poorly with the characteristics of startups. In addition, small and medium sized firms are often placed in the same category (SMEs), which is not ideal when investigating startups specifically. For example, Pelham (2000) studied small firms using a sample consisting of firms with sales levels between \$12-\$200 million in sales. Acs and Audretsch (1988) based their research on small firms on a sample including firms with less than 500 employees, while Hyvönen and Tuominen (2006) 'restricted' the definition to less than 100 employees in their work. These

studies exemplify the problem with generalizing the current findings for small firms to startups. However, researching startups exclusively is necessary as helping small businesses and new ventures succeed is important for the growth of today's economy (Audretsch and Thurik 2001; Hart 2003; Wennekers and Thurik 1999).

Market orientation

Market orientation is a construct that is widely discussed in the literature, and a construct that researchers have looked at from many different angles. Despite their differences, scholars agree on what market orientation constitutes. Firstly, the fact that it has a positive effect on performance (Deshpande et al., 1993; Han et al., 1998; Jaworski and Kohli, 1993; Slater and Narver, 1994) and that it must be present throughout the whole organization to be effective (Kohli and Jaworski, 1990, 1993; Narver and Slater 1990, 1994). Secondly, that it embraces not only a firm's customers and their current needs, but also the actions and the anticipated actions of the firm's competitors, new technology, government regulations, trends and the customers' latent needs (Kohli and Jaworski, 1990, 1993; Narver and Slater, 1990, 1994, 1995). In short, the entire environment in which the firm is operating needs to be supervised, analyzed and proactively responded to, not only reacted to (Slater and Narver 1998, 1999; Kohli, Jaworski and Sahay, 2000; Narver, Slater and MacLachlan, 2004).

Narver and Slater (1990, 1994) state that market orientation can be defined as an organizational culture that facilitates desired behaviors. Kohli and Jaworski (1990, 1993) provide a slightly different view; they argue that market orientation is the sum of a set of organizational behaviors, and that it can be measured on a continuum, meaning there can be several degrees of market orientation. According to their research, market orientation is a continuous, stepwise process that is defined in the following way: "Market orientation is the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organizationwide responsiveness to it" (Kohli and Jaworski 1990, p. 6). In the same study, it is argued that just paying attention to customer needs is not enough. In order to be market oriented, a firm must also be able to recognize how these needs are influenced by other, exogenous factors, including competitors' moves. Following these two studies from the 1990s, a wave of literature on market orientation has emerged. Especially, researchers have debated whether a market orientation can impede a firm's innovativeness due to the emphasis on customers and their expressed needs, not on their latent needs (Gatignon and Xuereb, 1997; Berthon, Hulbert and Pitt, 1999; Renko, Carsrud and Brännback, 2009). Christensen and Bower (1996) pointed out that industry leaders lose their position because they are too preoccupied with what their current customers want. Narver, Slater and MacLachlan (2004) faced this criticism by separating between responsive market orientation and proactive market orientation. Responsive market orientation caters to current customers' expressed needs, whilst proactive market orientation addresses current and potential customers and their (latent) needs. A proactive market orientation positively contributes to a firm's new product success. These findings imply that not only do firms have to generate, disseminate and respond to market intelligence, they also have to use this intelligence to proactively *lead* their customers

(Narver, Slater and MacLachlan, 2004). Because Kohli and Jaworski's (1990) definition also include future customer needs, their definition will be used in this study.

Market orientation can be described as an organizational mindset that makes the company constantly act on generated and disseminated market intelligence. According to the existing literature, it enables these organizations to respond to and proactively prepare for changes in its environment, which in turn enhances their performance. Concerning startups, very little research has been done on the link between market orientation and firm performance, perhaps due to the difficulties in measuring the performance of startups. Drawing on the existing literature on market orientation, this study investigates whether startups who manage to establish a market orientation early on and are able to utilize the intelligence they gather about the market in a way that allows them to avoid threats and exploit opportunities, are more successful than those who do not.

H1: The higher the degree of a startup's market orientation, the higher the performance of the firm.

According to Narver and Slater (1990, 1994), market orientation can be split into three components. Based on their classification, we identify three mechanisms that determine market orientation's effect on success in startups. These mechanism are related to (1) customers, (2) competitors, and (3) organizational cooperation:

An important component of market orientation is the firm's ability to make decisions based on what their customers want and need, as well as what they might want and need in the future (Kohli and Jaworski 1990; Narver and Slater 1990; Deshpandé, Farley and Webster 1993). In order words, the extent to which the firm puts its customers first. Narver and Slater (1990) use the term customer orientation, and define it as "the sufficient understanding of one's target buyer to be able to create superior value for them continuously" (p.21). To obtain such an understanding of their target customer, the firm must actively collect and disseminate data about them (Kohli and Jaworski 1990; Harrison-Walker, 2001).

H1a: The higher the degree to which a startup actively collects and utilizes customer data in its decision making, the higher the performance of the firm.

The literature argues that a mere customer focus is not enough to succeed in the market (Christensen and Bower 1996; Kohli and Jaworski 1990; Narver and Slater 1990). Businesses should also be aware of their competitive environment, and know how the moves of competitors might influence the needs and wants of their own current and potential customers (Kohli and Jaworski 1990). A common problem is that managers struggle with pinpointing where in an organization that information about competitors is collected and stored and thus, having problems with assembling together to all the relevant information into one piece (Day 1994). For market oriented firms, this should not be an issue - a main component of market orientation is generate and disseminate competitor intelligence within the firm (Kohli and Jaworski 1990; Narver and Slater 1990).

By doing so efficiently, a competitor oriented firm should be able to assess the short- and long-term advantages and disadvantages of both current and potential competitors (Zhou,

Brown and Dev 2009). With this information, firms can improve their performance (Noble, Sinha and Kumar 2002). A startup that collects and utilizes such intelligence is well aware of their competitive environment and equipped to act upon it. Thus, it is expected that startups that monitor their current and potential competitors will perform better than those who don't. **H1b:** The higher the degree to which a startup actively collects and utilizes competitor data in its decision making, the higher the performance of the firm.

The aforementioned mechanisms are related to acquiring information of external actors, but market orientation can also influence performance by affecting the internal structure of a firm. Decades ago, Felton (1959) argued that the functions of marketing should be integrated with all other business functions within a firm. Years later, Narver and Slater's (1990) work supported this argument by including interfunctional coordination as an essential component of marketing orientation. They defined the term interfunctional coordination as a firm's ability to coordinate the efforts across functions and create superior value to the customers (Narver and Slater 1990). The notion of cooperation across functions have continued to gain momentum as scholars have found more proof that it can increase performance (Deshpandé, Farley and Webster 1993; Day 1994; Ross Wooldridge and Minsky 2002; Shapiro 1988). Based on these findings, we believe that this can also play an important role in startups. As startups are generally smaller than mature firms, it's logical that coordinating efforts across functions is even more important as each function consist of fewer employees.

H1c: The higher the degree to which a startup coordinates its efforts across functions in the process of utilizing market data, the higher the performance of the firm.

The changing landscape of marketing analytics

Market orientation is a construct that has continued to evolve in the past decades. In addition to a growing body of literature in which it has been continuously studied, debated, defined and defined again, new developments change how businesses work on inducing their market orientation. Examples of this include focus on marketing capabilities (Day 1994; Morgan, Vorhies and Mason 2009), focus on innovativeness (Han, Kim and Srivastava 1998; Hurley and Hult 1998; Keskin 2006) or new technology like cloud computing (Buyya, Yeo and Venugopal 2008). The revolution in availability of data in the digital world represents a new development. It has paved the way for the latest step in marketing analytics and have revealed great opportunities for marketers. In addition to a greater availability of data, the velocity of information has increased – the firms no longer get one-time snapshots of the market, but high-frequency data. We refer to this latest development in marketing analytics as digital marketing analytics. With this concept, we refer to the possibility to collect huge amounts of data and transform it into useful insights about the market through digital tools. We hypothesize that digital marketing analytics widens the opportunities for entrepreneurs to analyze the market more precisely, thus having a positive impact on the importance of the presence of a market orientation in startups.

Most of the research concerning marketing in startups and small firms was conducted before the widespread use of digital marketing analytics. As the speed of the market in terms of technology, customer demand and competition, have increased, the complexity and speed in which companies have to acquire and analyze information must also increase. This makes digital marketing analytics an instrumental tool (Germann, Lilien and Rangaswamy 2013; Xu, Frankwick and Ramirez 2016). German et al. (2014) finds that retailing firms in particular have more to gain from deploying customer analytics. Many firms have already recognized the key competitive advantages that digital marketing analytics may provide, which has fueled the development and deployment of such tools (Davenport 2006). However, there is still no clear manual on how managers should develop their firm and implement the necessary skills and procedures to compete in this new data analytic environment (Wedel and Kannan 2016). With no ingrained organizational culture, startups have a golden opportunity to invest in and build their new organization culture and structure to gain competitive advantages from digital analytics.

Due to this explosion in technology and information, markets are becoming increasingly complex and demanding. This results in a widening gap between the complexity of the market and company's ability to respond (Day 2011). In his research, Day claims that a new perspective on marketing capabilities is required to close the gap. Two essential capabilities are, according to Day, vigilant market learning and market insight, both of which are obtainable through digital marketing analytics. Market orientation is essentially about how well a firm collects, disseminates and utilizes information about the market, and we believe that those who have capabilities in digital analytics will be more efficient as a market oriented firm – and more successful.

H2: If capabilities within digital marketing analytics are present in the startup, the firm increases their ability to understand the market, enhancing the effect market orientation has on success.

From the previous body of literature, we identify two mechanisms for why capabilities within digital marketing analytics enhance the effect of market orientation on success. One mechanism that might explain the influence is that the availability of digital markeingt analytics can be an antecedent to a data-driven decision culture in a company (Wedel and Kannan 2016), i.e. the employees embrace a mindset of basing decisions on statistical evidence. Down the line, we find that a culture where decisions are driven by data may lead to increased productivity and performance (Brynjolfsson and Kim 2011; Davenport 2006; Wedel and Kannan 2016). Having a culture that is supportive of market analytics is also essential to enable the company to realize the potential benefits (Germann, Lilien and Rangaswamy 2013). In mature firms, barriers of changing organizational cultures is often intertwined with the existing culture (Bass and Avolio 1994; Cameron and Quinn 2005). In a young firm, the organizational culture and values is not likely to be as settled as in a mature firm, making it easier to adjust to a data-driven decision culture. This can contribute to making this mechanism more prominent in startups. Thus, we hypothesize:

H2a: Use of digital marketing analytics leads to a data-driven decision culture in a startup.

A second mechanism is a better understanding of the marketing-mix through digital marketing analytics. In the last few years, scholars have made a connection between market analytics and the marketing-mix, claiming that analytics can give managers a better

understanding of and ability to forecast the marketing-mix (Albers 2012; Fan, Lau and Zhao 2015; Wedel and Kannan 2016). In environments where data on consumers, competitors, and the market in general is increasingly available, additional tools to better understand both internal and external factors will also surface (Albers 2012). Simply put, more data means more knowledge of the market, depending on the company's ability to utilize the information through analytics. This can for example make it possible to measure a firm's performance while controlling for trends, competitors and other external drivers. It will also give marketers a better understanding of the marketing-mix and the effect each component has on performance. This can be extremely useful when allocating resources across different products, segments and promotion (Albers 2012; Wedel and Kannan 2016). It is expected that by increasing the understanding of the marketing-mix through digital marketing analytics, entrepreneurs will be able to allocate their scarce resources more effectively, which in turn can enhance the market orientation in the firm.

H2b: Digital marketing analytics provides managers with a better understanding of the marketing-mix, which leads to a more efficient allocation of resources.

An interesting aspect of digital marketing analytics is that managers sometimes struggle with the realization of possible gains from systems, making them experience inert or even resistant to adopt them (Germann, Lilien and Rangaswamy 2013). In turn, this can prove costly for the firm (Day 2011; Kayande et al. 2009). Germann et al. (2014) encountered the same phenomenon when they studied the deployment of customer analytics in the retailing business. Often dealing with limited resources, entrepreneurs in startups must make tough decisions about how to invest their time and money. Thus, it is likely that entrepreneurs are more skeptical about their investments.

Methodology

Defining concepts

We will define the constructs and scales for measurement based on previous research. Required definitions and scales:

- Market orientation
- Startups and success
- Capabilities within digital marketing analytics (might be difficult as there is little existing literature on this topic, might adapt at measurements for other capabilities.

To answer our research question, we propose to perform a quantitative study. We believe a single survey is enough to measure the relevant concepts and get the data we need. The data will be analyzed using standard regression methods.

To create the survey, we will use previously tested scales to ensure we measure the right construct (validity?). This will be particularly important when measuring market orientation as it is a difficult construct to measure. We also realize that we will need to ask questions that some respondents are reluctant to share (e.g. sales figures), so we have to be very clear on the fact that the responses will be kept confidential.

Our respondents are startups based in Norway, Sweden and Denmark. In these countries, there are hundreds of innovation incubators and networks, each consisting of everything from a few to more than a hundred startups. We are going to target these networks and have them distribute the survey to their members. Their incentives would be the insight our results would give. Not all startups would fit our definition, so a thorough screening process must take place after collection. It is difficult to say how many respondents we will end up with, but we hope to have between 100 and 200 respondents within our definition. It is important that we include both successful and unsuccessful startups to avoid selection bias.

References

Acs, Z. J., & Audretsch, D. B. (1988). Innovation in large and small firms: an empirical analysis. *The American economic review*, 678-690.

Agarwal, S., Krishna Erramilli, M., & Dev, C. S. (2003). Market orientation and performance in service firms: role of innovation. *Journal of services marketing*, 17(1), 68-82.

Albers, S. (2012). Optimizable and implementable aggregate response modeling for marketing decision support. *International Journal of Research in Marketing*, 29(2), 111-122.

Appiah-Adu, K. (1998). Market orientation and performance: do the findings established in large firms hold in the small business sector? *Journal of Euromarketing*, 6(3), 1-26.

Audretsch, D. B. (2001). Research issues relating to structure, competition, and performance of small technology-based firms. *Small business economics*, 16(1), 37-51.

Audretsch, D. B., & Thurik, A. R. (2001). What's new about the new economy? Sources of growth in the managed and entrepreneurial economies. *Industrial and corporate change*, 10(1), 267-315.

Baker, W. E., & Sinkula, J. M. (2009). The complementary effects of market orientation and entrepreneurial orientation on profitability in small businesses. *Journal of Small Business Management*, 47(4), 443-464.

Bass, B. M., & Avolio, B. J. (1994). Transformational leadership and organizational culture. *The International Journal of Public Administration*, 17(3-4), 541-554.

Baum, J. A., Calabrese, T., & Silverman, B. S. (2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic management journal*, 267-294.

Brynjolfsson, E., Hitt, L. M., & Kim, H. H. (2011). Strength in numbers: How does data-driven decisionmaking affect firm performance?.

Buyya, R., Yeo, C. S., & Venugopal, S. (2008). Market-oriented cloud computing: Vision, hype, and reality for delivering it services as computing utilities. *In High Performance Computing and Communications, 2008. HPCC'08. 10th IEEE International Conference* (5-13)

Cameron, K. S., & Quinn, R. E. (2005). Dagnosing and changing organizational culture: Based on the competing values framework. *John Wiley & Sons*.

Cohen, W. M. (1995). Empirical Studies of Innovative Activity. Chapter 6 of Handbook of the Economics of Innovation and Technological Change.

Cohen, W. M., & Klepper, S. (1992). The tradeoff between firm size and diversity in the pursuit of technological progress. *Small Business Economics*, 4(1), 1-14.

Davenport, T. H. (2006). Competing on analytics. Harvard business review, 84(1), 98.

Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 37-52.

Day, G. S. (2011). Closing the marketing capabilities gap. *Journal of marketing*, 75(4), 183-195.

Deshpandé, R., Farley, J. U., & Webster Jr, F. E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. *The journal of Marketing*, 23-37.

Eden, L., Levitas, E., & Martinez, R. J. (1997). The production, transfer and spillover of technology: comparing large and small multinationals as technology producers. *Small Business Economics*, *9*(1), 53-66.

Fan, S., Lau, R. Y., & Zhao, J. L. (2015). Demystifying big data analytics for business intelligence through the lens of marketing mix. *Big Data Research*, 2(1), 28-32.

Felton, A. P. (1959). Making the marketing concept work. Harvard Business Review, 37(4), 55-65.

Furr, N., & Ahlstrom, P. (2011). *Nail it then scale it: the entrepreneur's guide to creating and managing breakthrough innovation* (No. 658.421 FUR. CIMMYT.).

Germann, F., Lilien, G. L., & Rangaswamy, A. (2013). Performance implications of deploying marketing analytics. *International Journal of Research in Marketing*, *30*(2), 114-128.

Germann, F., Lilien, G. L., Fiedler, L., & Kraus, M. (2014). Do retailers benefit from deploying customer analytics?. *Journal of Retailing*, *90*(4), 587-593.

Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of marketing research*, 77-90.

Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link? *The Journal of marketing*, 30-45.

Harrison, B. (1994). Lean and Mean: The resurrection of corporate power in an age of flexibility. New York, Basic Books

Harrison-Walker, L. J. (2001). The measurement of a market orientation and its impact on business performance. *Journal of Quality management*, 6(2), 139-172.

Hart, D. M. (Ed.). (2003). *The emergence of entrepreneurship policy: governance, start-ups, and growth in the US knowledge economy*. Cambridge University Press.

Hult, G. T. M., Ketchen, D. J., & Slater, S. F. (2005). Market orientation and performance: an integration of disparate approaches. *Strategic Management Journal*, 26(12), 1173-1181.

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *The Journal of Marketing*, 42-54.

Hyvonen, S., & Tuominen, M. (2006). Entrepreneurial innovations, market-driven intangibles and learning orientation: critical indicators for performance advantages in SMEs. *International Journal of Management and Decision Making*, 7(6), 643-660.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *The Journal of marketing*, 53-70.

Jaworski, B., Kohli, A. K., & Sahay, A. (2000). Market-driven versus driving markets. *Journal of the academy of marketing science*, 28(1), 45-54.

Kayande, U., De Bruyn, A., Lilien, G. L., Rangaswamy, A., & Van Bruggen, G. H. (2009). How incorporating feedback mechanisms in a DSS affects DSS evaluations. *Information Systems Research*, 20(4), 527-546.

Keskin, H. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of innovation management*, 9(4), 396-417.

Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of marketing*, 69(2), 24-41.

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *The Journal of Marketing*, 1-18.

Little, J. D. (1970). Models and managers: The concept of a decision calculus. *Management science*, 16(8), B-466.

McGrath, R. G. (1999). Falling forward: Real options reasoning and entrepreneurial failure. *Academy of Management review*, 24(1), 13-30.

Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, *30*(8), 909-920.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *The Journal of marketing*, 20-35.

Narver, J. C., Slater, S. F., & MacLachlan, D. L. (2004). Responsive and proactive market orientation and new-product success. *Journal of product innovation management*, 21(5), 334-347.

Nieto, M. J., & Santamaría, L. (2010). Technological collaboration: bridging the innovation gap between small and large firms. *Journal of Small Business Management*, 48(1), 44-69.

Noble, C. H., Sinha, R. K., & Kumar, A. (2002). Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications. *Journal of marketing*, 66(4), 25-39.

Pelham, A. M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of small business management*, 38(1), 48.

Pelham, A. M., & Wilson, D. T. (1995). A longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimensions of small-firm performance. *Journal of the academy of marketing science*, *24*(1), 27-43.

Renko, M., Carsrud, A., & Brännback, M. (2009). The effect of a market orientation, entrepreneurial orientation, and technological capability on innovativeness: A study of young biotechnology ventures in the United States and in Scandinavia. *Journal of Small Business Management*, 47(3), 331-369.

Ross Wooldridge, B., & Minsky, B. D. (2002). The role of climate and socialization in developing interfunctional coordination. *The Learning Organization*, 9(1), 29-38.

Shapiro, B. P. (1988), What the Hell is Market Oriented?. *Harvard Business Review*, 66 (November/December), 119-25.

Slater, S. F., & Narver, J. C. (1994). Market orientation, customer value, and superior performance. *Business horizons*, *37*(2), 22-28.

Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organization. *The Journal of marketing*, 63-74.

Slater, S. F., & Narver, J. C. (1998). Customer-led and market-oriented: Let's not confuse the two. *Strategic management journal*, 1001-1006.

Slater, S. F., & Narver, J. C. (1999). Market-oriented is more than being customer-led. *Strategic management journal*, 1165-1168.

Tether, B. S. (1998). Small and large firms: sources of unequal innovations?. *Research Policy*, 27(7), 725-745.

Verhees, F. J., & Meulenberg, M. T. (2004). Market orientation, innovativeness, product innovation, and performance in small firms. *Journal of small business management*, 42(2), 134-154.

Wedel, M., & Kannan, P. K. (2016). Marketing analytics for data-rich environments. *Journal of Marketing*, 80(6), 97-121.

Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small business economics*, 13(1), 27-56.

Xu, Z., Frankwick, G. L., & Ramirez, E. (2016). Effects of big data analytics and traditional marketing analytics on new product success: A knowledge fusion perspective. *Journal of Business Research*, 69(5), 1562-1566.

Zhou, K. Z., Brown, J. R., & Dev, C. S. (2009). Market orientation, competitive advantage, and performance: A demand-based perspective. *Journal of business research*, 62(11), 1063-1070.