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Jerry Ocran

**ANALYSES OF DIGITAL MARKETING CHANNELS AND  
INTERNATIONAL SALES PERFORMANCE OF  
SMALLER BORN GLOBAL AGRICULTURAL FIRMS IN  
GHANA**

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<b>Author:</b>	Jerry Ocran
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**ABSTRACT :**

Currently, smaller-born global agricultural firms in Ghana are facing many marketing-related challenges which most researchers are of the view that the usage of appropriate digital marketing channels will help in narrowing or eliminating these challenges. This study, therefore, investigated the influence digital marketing channels have on the international sales performance (ISP) of these firms, taking into consideration the three-dimensional moderating role of international entrepreneurial orientation (IEO), which includes innovativeness, proactiveness, and risk-taking ability. The study employed a cross-sectional survey design with a quantitative approach. The study area was Cape Coast and Sekondi-Takoradi Metropolises. The target population was all owners/managers of the 2,592 registered and active SMEs in the two Metropolises, of which 97 were registered as smaller born global agricultural firms who were the accessible population.

The census method was employed to capture the owners of the Small and mid-size enterprises that formed the study population because they were too small. Structured questionnaire, with a reliability coefficient ranging from .798 to .877, was used to collect the data. The data were analyzed by utilizing both descriptive and inferential statistical tools. The findings revealed that when the firms use digital channels effectively, they are likely to build a good relationship with potential and existing customers because these marketing strategies are cost-effective and mostly utilized by clients.

However, this impact becomes higher as the firms employ their innovativeness, proactiveness, and risk-taking ability to gain a competitive advantage over their rivals in the international market. It is, therefore, necessary for the firms to strengthen their respective international entrepreneurial orientation strategies in order to boost their international sales performance. It was recommended to the owners/managers to ensure that there is regular staff training on the usage of digital channels in the marketing of their products and services.

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**KEYWORDS:** Digital Marketing Channels, International Entrepreneurial Orientation, International Sales Performance, Smaller Born Global Agricultural Firms.

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## Abbreviations

DMCs:	Digital Marketing Channels
IEO:	International Entrepreneurial Orientation
ISP:	International Sales Performance
SBGAFs:	Smaller Born Global Agricultural Firms
INVs:	International New Ventures
AGI:	Association of Ghana Industries

# 1 Introduction

This chapter highlights the concept of digital channels and international sales performance of smaller born global agricultural firms in Ghana. Quite apart from looking at the background, the chapter further presents the research gap, purpose and questions or objectives, and the centrality of the study. Furthermore, key definitions and the delimitation of the study are discussed in the context of Ghana.

## 1.1 Background to the Study

Born global firms and digital marketing channels are two major trends that have tremendously gained critical attention in international business and research. Specifically, recent exponential growth in technology and digitalization greatly influences the appropriate choices of digital sales channels firms may utilize during the internalization process (Gabrielsson & Gabrielsson, 2011). Thus, one of the strategies by which firms normally employ to boost their international sales is digital channels (Dunakhe & Panse, 2021; Kocak & Abimbola, 2009; Ofori, 2009). Globally, the usage of digital marketing channels has intensified in the last two years due to the Covid-19 pandemic (Dwivedi et al., 2021). The pandemic has forced people to rely heavily on e-commerce to transact business activities. Also, most firms are now using various digital marketing channels more because they are convenient and effective (El Junusi, 2020; Ezepue & Ochinawata, 2017; Heinonen, & Michelsson, 2010; Kim, 2020).

Digital marketing involves all-encompassing expression that includes diverse categories of internet marketing, for instance, social media, search engine optimization (SEO), affiliate marketing, and others (Bhardwaj & Bordoloi, 2020; Dunakhe & Panse, 2021). Most born global firms in the agricultural sector of developing countries such as Ghana continue to use appropriate digital marketing interventions to help increase their international sales (Ofori, 2009; Nuseir & Aljumah, 2020; Seglah & Armah (2020). Firms

are usually classified as born globals based on their capability to utilize their limited resources to sell their products and services in several multiple countries beyond their local continents after a few years in business operation. (Andersson, 2011; Autio, Sapienza & Almeida, 2000; Cavusgil & Knight, 2009; Ezepue & Ochinanwata, 2017; Gull et al., 2021; Knight and Cavusgil, 2005; Oviatt & McDougall 1994; Pimenta, Joswig, Oliveira & Sbragia, 2017; Rennie, 1993). In this study born globals may be defined as firms that from the early stages of business operations aim at going to other foreign markets to sell their products and services in multiple countries.

Several theories and models have been used by previous researchers to examine the relationship between the usage of digital market channels and the international sales performance of born globals. Particularly among them is the Technology-to-Performance Chain (TPC) theory (Ahearne, Srinivasan & Weinstein, 2011; Maundu, 2020; Melville, Kraemer & Gurbaxani, 2013; Wade & Hulland, 2014; Weill, 2010). Few studies have examined the usage of digital market channels and their influence on international sales performance, taking into consideration the moderating role of IEO factors of the firms (Gull et al., 2021; Rouzies et al., 2016; Hashai & Almor 2004).

In Ghana, the usage of digital market channels is an emerging phenomenon, by small and medium scale enterprises (SMEs) that have gone global (NBSSI, 2020). According to NBSSI (2020), these firms started using digital market channels for their international sales in 2010. Regarding the significance of the study, considering the peculiar case of Ghana as an emerging market for digital market channels, smaller-born global firms need to understand how the use of these digital channels can contribute to an increase in international sales. Therefore, the findings of the study will significantly help to explain the dynamics of modern channels and the relationship that exists between digital marketing and the international sales performance of firms. Also, the findings of this study would assist researchers and practitioners on how international entrepreneurial orientation (IEO) can help boost both domestic and international sales of born global agricultural firms.

## 1.2 Research Gap

Currently, there is a growing number of smaller-born global firms investing in various forms of digital market channels to improve their international sales (Bhardwaj & Bordoloi, 2020; Garrett, Straker & Wrigley, 2017). Though firms spend substantial sums to improve their marketing drive, there is still a high prevalence of failure of many digital marketing strategies adapted by smaller born globals in Ghana and other developing countries (Adu-Darko, 2017; Suleiman et al., 2020). Also, various studies into the association between the usage of digital marketing channels and international sales performance have so far shown mixed results. For example, Seglah and Armah (2020) report an insignificant effect of digital marketing usage on the sales output of Ghanaian service companies. Other researchers have found that heavily relying on digital marketing channels may not automatically lead to improved sales performance (Tanner & Shipp, 2005). Therefore, is the need to consider other moderating factors relating to an international entrepreneurial orientation such as innovativeness, proactiveness, and risk-taking (Adu-Darko, 2017; Sinha & Srivastava, 2016).

Although there are some existing studies conducted on born global firms, but not regarding smaller born global agricultural firms in Ghana. Some of the reasons that prompted the researcher to study this area are, agriculture is the major employment sector in Ghana and also generates the bulk amount of the government and private sectors revenue. Besides, my critical review of most of the similar existing literature in the context of born globals indicates that research on smaller born global agricultural firms is very scarce. Additionally, researchers such as Omar, Zan, Hassan, and Ibrahim (2020), Dwivedi et al. (2021), and Gull et al., (2021) suggested that more research needs to be conducted regarding the relationship between digital channels and international sales performance. Finally, with current technological advancement and globalization, most of these firms in Ghana are aiming to expand their international market share in order to increase revenue and be more competitive globally. The above-indicated lacunas motivated me to conduct research in this area to fill the gaps.



### 1.3 Purpose, research objective, and questions of the study

Smaller-born global agricultural firms in Ghana mostly encounter challenges such as resource capacity constraints and environmental problems in the global market (Adu-Darko, 2017; Afriyie et al., 2020). One of the key marketing strategies that some entrepreneurs employ to overcome their resource restrictions and capacity is the use of digital marketing channels (Jacobson, Gruzd & Hernandez-García, 2019; Ofori 2009). Additionally, the success of born global firms is contingent on several reasons, for instance, the international business experience of entrepreneurs, coupled with the firms' entrepreneurial orientation ability (Gull et al., 2021; Knight & Cavugil 2004; Knight, Madsen & Servais, 2004; Wiklund & Shepherd, 2005; Zahra, 2005). Therefore, there is the need to investigate the influence digital channels have on the international sales performance of smaller born global agricultural firms in Ghana, taking into consideration the possible role of IEO such as proactiveness, innovativeness, and risk-taking ability of such firms. Based on this background and the purpose of the study, the following main research problem was developed to direct the argument of the study.

*To what extent do the dimensions of IEO such as innovativeness, proactiveness, and risk-taking moderate the influence of the adoption of digital marketing channels have on the international sales performance of born global agricultural firms?*

Clearly, the above research problem is broad, thus, to help the reader understand the aim of the paper, and to follow the steps that are employed to answer the main research question. More detailed sub-questions are formulated for this study:

- 1. What are the international digital marketing channels used by smaller-born global agricultural firms in Ghana?*
- 2. What is the level of international entrepreneurial orientation of smaller-born global agricultural firms in Ghana?*

*3. What is the degree of internationalization of smaller-born global agricultural firms in Ghana?*

*4. What are the reasons for smaller-born global agricultural firms in Ghana to use international digital marketing channel(s)?*

*5. What is the influence of digital marketing channels usage on the international sales performance of smaller born global agricultural firms in Ghana?*

*6. In what ways do smaller born global agricultural firms' size and experience influence their international sales performance?*

#### **1.4 Scope of the study**

The study will be restricted to digital marketing channels that are mostly used by smaller-born global agricultural firms in the Central and Western Regions of Ghana (see **Figure 2.2**). Although restricting the study like this made it easier to control extraneous variables, it may render the generalization of the findings of this study across all smaller-born global firms and digital marketing technologies inappropriate. Concerning the subjects, the study will focus on only owners/managers of smaller-born global agricultural firms in the study area which may also limit its generalization.

#### **1.5 Key Definitions**

For this study, the under listed comprehensive terminologies were defined specifically to enhance understanding of the study.

**Born globals** are firms that from the beginning of their business operations aim at

covering the global market. Also, according to other researchers, they are firms that go international in three years from their inception and have 25 percent of total revenue from the international market or have at least 75 percent of foreign sales within nine years of their operations (Hashai & Almor, 2004; Knight & Cavusgil, 2005).

**Digital marketing channels** is an all-encompassing term that includes all types of online marketing tools used by firms. This includes video, SEO, social media, and affiliate marketing tools (Bhardwaj & Bordoloi, 2020; Dunakhe & Panse, 2021).

**International entrepreneurial orientation** is a series of competencies that create room for firms to utilize their innovative, proactiveness, and risk-taking ability to gain a competitive advantage. Within the context of this study, three main dimensions were considered; namely, proactiveness, innovativeness, and risk-taking ability (Wiklund & Shepherd, 2005).

**International sales performance** is defined as a functional measurement of sales in terms of its contributions to the goals and objectives of the firm. It looks at the degree to which firms carry out activities to build relationships with prospective international customers as well as existing customers and producers (Bharadwaj, 2000).

## 1.6 Structure o the study

The report of this research work comprises five chapters. The first chapter is an introduction while the second chapter presents a literature review on the various variables of the study. The third chapter introduces the research approach and provides a discussion on the methodological choices that are made for the study. the fourth chapter is devoted to the findings of the thesis, while the last chapter focuses entirely on the conclusions of the study.

## 2 Theoretical setting of the Thesis

This part of the report focused on a review of the literature on digital marketing channels and ISP of smaller-born firms. Specifically, the theoretical setting of the study comprises three main concepts: smaller born globals, digital marketing channels, and international sales performance. Besides, the concept of IEO and conceptual framework and hypothesis relating to the study are also presented.

### 2.1 The concept of digital marketing channels

Due to current technological development, the users of a digital platform to transact business activities have increased significantly, a situation which is pushing firms to realize their economic value (Bollweg, Lackes, Siepermann & Weber, 2019). Most researchers assert that the use of internet marketing and other digital platform emerged from the nineteenth century (Bollweg et al., 2019; Chen, Liu & Mattila, 2020).

In today's world, almost all firms are utilizing digital platforms to carry out their business operations. This is so because digital channels are usually employed by management to reach their customers conveniently and at a low cost (Dahiya & Gayatri, 2018; Dunakhe & Panse, 2021; Dwivedi et al., 2021). Also, most modern consumers are opting for virtual platforms, a phenomenon influencing firms' brand image and helping build customer relationships (Grewal, Stephen & Coleman, 2019). However, due to the differences that exist among firms, there is the need for marketers in each firm to consider their brand, business goals, target audience, and budget before deciding on the type of digital channels that are appropriate for their business (Petit, Velasco & Spence, 2019; Wagner, Schramm-Klein & Steinmann, 2020). Some of the digital marketing channels mostly employed by the management of firms in their business operations are briefly explained below.

The first to consider is **video marketing**, which is mostly utilized by marketers. Quite apart from helping to build brand awareness, the video marketing channel is also effective in boosting firms' traffic and conversions. It is also a non-restrictive form of content advertising. According to [Zhang, Qin, Wang and Luo \(2019\)](#) firms require to create better content by using specific keywords, for example, YouTube which addresses the need of their customers that will enable them to attract both potential and existing clients. This is so because a lot of people make use of YouTube every day ([Zhang et al., 2019](#)). Therefore, smaller-born global agricultural firms in Ghana must promote their respective videos on their digital platforms. Video marketing can boost conversions, and help firms build relationships with their loyal customers.

In relation to **email marketing**, [Babutsidze \(2018\)](#) considers it to be an effective and essential digital channel because it contributes more to business growth. Basically, it is a marketing strategy that employs e-mail to reach customers. According to [Babutsidze \(2018\)](#) email marketing channel conveys more essential content to a subscriber's inbox. Management of the firms' may employ an email strategy to reach their clients, by delivering important product information and services ([Childers, Lemon & Hoy, 2019](#)). Most researchers regard an email newsletter to be the best marketing tactic which the management of smaller-born global agricultural firms can utilize to contact potential and existing customers ([Hollebeek & Macky, 2019](#); [Appel et al., 2020](#)).

Another most effective type of digital channel tool is **content marketing** that contributes to boosting firms' sales which in the long run will help increase their return on investment ([Kumar, Bezawada, Rishika, Janakiraman & Kannan, 2016](#)). According to [Hollebeek and Macky \(2019\)](#) content marketing is more effective in generating leads better than traditional channels. Specifically, clients that exhibit a high probability of buying the firm's products and are willing to become loyal customers in the future are called Leads ([Ahearne et al., 2011](#); [Zhu et al., 2018](#)).

The next channel to consider is **social media marketing**. This is a type of marketing strategy that management use to build brand image through an appropriate network and modern technology (Müller, Pommeranz, Weisser & Voigt, 2018). It is the fastest-growing digital channel that creates room for the management of a firm to market its products and services (Jacobson et al., 2019; Zhu, Tse & Fei, 2018). Especially, for smaller-born global agricultural firms in Ghana, effective use of social media marketing could increase their brand image (NBSSI, 2019).

The next channel to consider is **search engine optimization**, which is considered to be the main approach of internet marketing. It is “an art or web traffic science” by using diverse “websites” to reach customers through the firms’ site (Silva, Farias, Grigg & Barbosa, 2019).

Quite apart from the types of DMCs explained above, other ones can also be used or are being used by smaller born global agricultural firms in Ghana. However, the last to briefly explain is **affiliate marketing**. It is a commission-based type of marketing tactic where firms reward potential clients for recommending their products or service to other customers (Liu, Ozanne & Mattila, 2018). In such situations, customers earn profit by endorsing commodities from other companies.

The assertions so far show that buyers’ journey is changing tremendously due to the adoption of digital platforms by firms to transact business activities (Lucas, 2019). However, users of digital marketing do experience some challenges that include swindling of customers by fraudsters, poor internet connectivity, non-physical verification of products, and distrust of the online payment system. Despite the above challenges associated with digital channels tactics, most firms use them effectively to reach their customers (Müller et al., 2018; Wagner et al., 2020). Therefore, smaller-born global agricultural firms need to change their marketing strategy by embracing digital channels for marketing their products and services in the international markets.

### 2.1.1 The concept of born globals

Born globals is a type of international new venture (INVs) that was initially conceptualized as a phenomenon in the early 1990s (Oviatt & McDougall, 1994). Knight and Cavusgil (2005), deliberated on the phenomenon of rapid internationalization among young ventures in various countries, and on the basis of that, they theorized on the issue of born globals. More importantly, the deployment of internet sales strategy facilitates born global firms to internationalize swiftly to other foreign countries to sell their products and services irrespective of their small size and resources capacity constraints (Gabrielsson et al., 2012; Gabrielsson & Gabrielsson, 2013).

Born globals are perceived to be a type of start-ups firms that aims at selling their products beyond their domestic market during their early stages of business activities (Cavusgil & Knight, 2009; Knight et al., 2004). They can be contextually defined as firms that aim of selling their products and services in foreign or multiple countries beyond their local market at their inception by relying on their limited resources and capabilities (Gerschewski, Rose & Lindsay, 2015; Wong & Merrilees, 2012).

These kinds of start-ups firms do not follow the traditional international process that proposed that companies need to establish well enough in their country of origin before seeking international opportunities (Wong & Merrilees, 2012; Escandon-Barbosa et al., 2019; Altshuler, 2012; Wong & Merrilees, 2012; Zou & Ghauri, 2010). Different researchers use different concepts to represent this phenomenon. Examples of such concepts include born globals, global start-ups, international entrepreneurship, and early, rapid internationalization.

The current study highlights smaller-born global agricultural firms in Ghana. They are conceptualized as SMEs that make international sales of one or several products, from or near their inception. In the context of Ghana, born globals belong to the category of firms that has less than one hundred employees and their yearly income not more than

15 million US dollars (Ofori, 2009; NBSSI, 2020). Although they face the problem of resource capacity constraints, they strive to succeed in the international market through the application of technology and relying on competent staff to enter the international market (Seglah & Armah, 2020; Wong & Merrilees, 2012; Zortea-Johnston, Darroch & Matear, 2012).

Within the context of SMEs in the Ghanaian agricultural sector, born globals play a prominent role by contributing significantly to annual income earned by the state (NBSSI, 2019). The government and major stakeholders in the manufacturing, production, and services sectors focus largely on both large corporate entities and SMEs because they help boost the employment rate in the country (NBSSI, 2019). Current globalization and economic clout are pushing countries, including Ghana to embrace internationalization among micro and small firms. Particularly those in the agriculture sector, where Ghana has some edge over other countries, specifically regarding the production of cocoa, peanut, oranges, watermelon, cashew, pear, mango, pineapple, banana, plantain, ginger, shea butter, and others.

### **2.1.2 International Sales Performance of Smaller Born Global Firms**

The performance of a firm is the result of regulatory procedures and objective acknowledgment in the organization (Hunter & Perreault, 2012). It can likewise be viewed as achieving tasks that hang on human power by incorporating all the firms' objectives. According to Gerschewski et al. (2015), it assembles brilliancy and also identifies with cost, adaptability, speed, and unwavering quality. What is more, international sales performance (ISP) can be characterized as an umbrella term that covers all ideas identified with firm international sales achievement and activities. Firms with a high level of ISP have an advantage as far as their vision, mission, objectives, initiative, and corporate procedures are considered seriously (Ahearne et al., 2011; Nuseir & Aljumah, 2020). The current study focuses on the international sales



performance (ISP) of born global firms which is a subset of the firm's performance. According to [Kocak and Abimbola \(2009\)](#), ISP measures are those which empower firms to coordinate their international sales activities towards accomplishing their strategic objectives ([Melville et al., 2013](#); [Tanner & Shipp, 2005](#)).

International sales performance can be defined as a functional measurement of its contributions to the goals and objectives of the firm ([Nuseir & Aljumah, 2020](#)). In most cases, it is related to return on sales, which is one of the profitability indicators in the corporate world. Measuring ISP has been a problematic issue as different authors have debated extensively on the merits of using quantitative measures, evaluations by managers or marketers. Previous studies ([Bharadwaj, Bharadwaj & Konsynski, 2004](#); [Omar et al., 2020](#); [Weill, 2010](#); [Wiklund & Shepherd, 2005](#); [Yongvongphaiboon & Chantamas, 2021](#)) used a quantitative outcome-based approach (i.e. measuring ISP using sales unit, dollar value, or percentage of quota). However, [Gelderman \(2009\)](#) warned that while this approach may be important, it may also be an incorrect measure to use in a relational digital marketing context. For example, in order to close the deal and meet their international sales quota, firms or marketers may try to sell products to customers without properly identifying their needs. Thus, customers may end up with products they do not need and feel disaffected. As a result, while international sales, in monetary terms, may increase, it is achieved at the expense of diminished global customer relations in the long term.

In view of the above, ISP can be seen as the degree to which firms carry out international activities to build global relationships with prospective customers as well as existing customers ([Gerschewski et al., 2015](#)). Therefore, the ISP construct should not be measured purely by global customer acquisition and creating a new business but should include customer retention as well. Researchers such as [Bharadwaj et al. \(2004\)](#), [Wiklund and Shepherd \(2005\)](#), [Weill \(2010\)](#), [Gerschewski et al. \(2015\)](#), [Omar et al. \(2020\)](#), and [Yongvongphaiboon and Chantamas \(2021\)](#) contend that ISP should be measured in terms of client satisfaction and loyalty. Therefore, firms need employees

with the requisite IEO factors such as innovation, proactiveness, and risk-taking ability to help design and implement global marketing strategies that will enhance the satisfaction and loyalty of the global customer. Therefore, the current study considered these factors as moderators, with the view that they will help in boosting the influence the usage of DMCs has on ISP of firms.

In examining the International Entrepreneurial Orientation (IEO) of firms, [Gull et al. \(2021\)](#) projected that the deployment of export promotion programs (EPPs) strategy to enter the foreign market may have a positive influence on international performance. They further added that both export promotion programs (EPPs) and IEO are essential factors when considering network relationships of born global firms. The argument that IEO can moderate the link between digital marketing channels and ISP of smaller born globals is consistent with the research findings of many researchers concerning organizational objectives and implementing technology regarding the international sales process ([Gull et al., 2021](#); [Markus & Soh, 2016](#)).

### **2.1.3 International Entrepreneurial Orientation**

Generally, the SMEs sector is not devoid of international entrepreneurial orientation. Hence, firms' IEO has become a crucial issue in contemporary times within the SMEs sector, particularly among smaller-born global agricultural firms in Ghana. Smaller-born global firms and their employees are expected to possess some sort of IEO competencies such as proactiveness, innovativeness, and risk-taking ability ([Adu-Darko, 2017](#); [Abrantes 2018](#); [Sinha & Srivastava, 2016](#)). These components of entrepreneurial orientation are utilized in different facets of firms' daily activities and operations. Several studies have demonstrated the relevance of these components to firms with regard to their sustenance and contribution to growth. For example, [Afriyie et al. and Roose \(2018\)](#) discovered that innovativeness, proactiveness, and risk-taking ability are significantly associated with the growth and development of firms.

**Innovativeness** reflects a firm's support of new theories, experimentation, and creativity (Bagheri, 2017; Jain & Ali, 2014; Zhou, Barnes & Lu, 2010). Innovation is also seen as a concept that makes firms internationally competitive because they can see new opportunities in the international market, and also are able to respond appropriately to changes in the international market (Evers & O'Gorman, 2011; Schachtebeck, Groenewald & Nieuwenhuizen, 2019). Thus, for firms to be innovative, they need to discover new ideas and initiatives that could help produce non-existing commodities and technology that can contribute immensely toward the ISP of born globals (Gull et al., 2021; Weill, 2010; Roose, 2018; Knight & Cavusgil, 2004). Innovation adapted by smaller-born global agricultural firms should be aligned with the firms' vision and goals that will help them maximize sales and profits (Wong & Merrilees, 2012; Onyema, 2014; Sinha & Srivastava, 2016). In Ghana and other developing nations, smaller born globals are more likely to adopt innovations in their digital marketing interventions because the adoption of innovation helps SMEs to succeed internationally (Bouchard & Basso, 2011; Jain & Ali, 2014).

The next component of international entrepreneurial orientation to consider is **proactiveness** which denotes being creative and undertaking current opportunities regarding demand in the international markets (Bagheri, 2017; Bateman & Crant, 1993). Through proactiveness, firms can predict international trends while exploring prospects to improve their international business operations performance (Schachtebeck et al., 2019). By so doing, firms can nurture innovativeness and creativity among employees and also introduce new products and services in the international (Bharadwaj, 2000; Becherer & Maurer, 1999; Duradoni & Di Fabio, 2019). This calls for the need for owners/managers of smaller born global agricultural firms in Ghana to be proactive in their business operations because such strategy will give them a competitive advantage over their rivals (Bateman & Crant, 1993; Boso et al., 2017; Heikkinen, 2011; Roose, 2018).

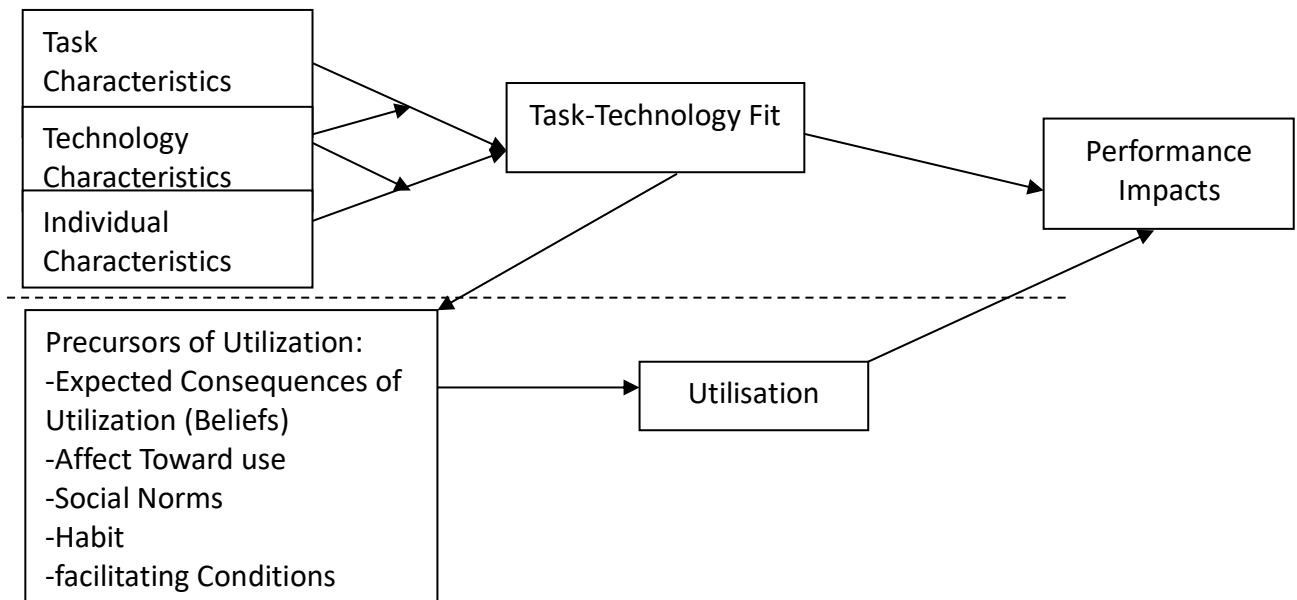
The last component of international entrepreneurial orientation to be considered is the *risk-taking* ability of the firms. Since the inception of entrepreneurship, one key marketing strategy that differentiates business owners and managers is the ability to take profitable risks that ensure their success in the international market (Falola et al., 2018). Risk-taking is an act of committing resources into an investment with an unpredictable business result (Zahra, 2005). In most firms, the ability to take calculated risk has a positive relationship with performance (Boso et al., 2017). Nevertheless, risk-taking can harm firms' international sales, especially when adopting digital marketing channels that are not popular in the global business environment (Schachtebeck et al., 2019). Similarly, too risky global operations may lead to the withdrawal from the markets even though rapid growth is achieved through the adoption of risky digital marketing interventions (Hunter & Perreault, 2012).

Depending on the level of development and resource capacity, smaller born globals always seeks to undertake high-risk investment that has high returns in the future (Karra, Phillips & Tracey, 2008; Amo, 2017; Ofori, 2009; Zahra 2005). According to Zahra (2005), there are several risks that firms can take, the most common risk is the business risk. He further suggested that certain factors that cannot be controlled by born globals, for instance, technological changes, government regulations, and unpredictable economic indices greatly affect a firm's earnings (Zahra, 2005).

## 2.2 Theoretical review

Researchers of digital marketing systems have usually based their theoretical foundations on theories of information systems (IS) and information technology (IT) based on the assumption that the use of IS will automatically lead to improved performance (Ahituv & Giladi, 2004), Particularly Technology-to-Performance Chain (TPC) theory. It underpins the collection of interrelated ideas used to explain digital marketing channels and sales performance of smaller born global firms'.

Good and Stone (2000) researched customer opinions as predictors of deployment and task-technology fit as a predictor of accomplishment. They further proposed a new model which emphasizes the importance of technology utilization and task-technology fit as pre-requisites for a positive impact of technology on the sales performance of firms. According to Ahituv and Giladi (2004), the first stream of research on which TPC is based on theories of attitudes and behavior which posit that user attitudes, social norms, and other situational factors will lead to intentions to use the system and eventually, to increased utilization. In the task-technology fit stream of research, utilization is implicitly assumed, and the focus on the fact that sales performance is enhanced to the extent that the features of a technology are compatible with the tasks performed by employees and the firm (Wilson, 2006), as presented in **Figure 2.1**.



**Figure 2.1:** Technology-to-Performance Chain (TPC) Model

Source: Adapted from Good and Stone (2000).

In their evaluation of both the utilization focus and task-fit focus streams, Goodhue and Thompson (1995) acknowledged that there are limitations of both models. For example, in the utilization focus model, more utilization of the technology may not necessarily lead to greater sales performance. This is especially true in the case of an

inferior digital marketing system where higher usage will not result in improved sales performance because of poor task technology fit. Likewise, in the fit focus model, there is little attention paid to the utilization aspect, because of this, the fit model does not take into account other factors (e.g. individual and situational) which may impact the utilization of the system.

The TPC model, therefore, seeks to overcome these limitations by incorporating the insights of both research streams together. It recognizes that digital technology needs to be utilized and fit the tasks it supports to improve ISP. **Figure 2.1** provides the full features of the TPC model. In brief, the TPC model gives attention to the fact that the utilization of a system is affected by several factors such as individual beliefs about the system as well as facilitating conditions that may enhance or impede its utilization. The model also focuses on the types of digital marketing tools used and the tasks that are required by the user to convert inputs into outputs (Venkatesh & Davis, 2010).

Another important feature of the TPC model is that it also acknowledges that individual characteristics may affect how well a customer uses or subscribes to a particular digital marketing channel. Overall, the TPC model provides a more holistic framework in understanding the relationship between digital marketing channels utilization and sales performance of firms compared to the utilization or fit focus models as a standalone (Oliver & Anderson, 2011; Porter & Millar, 2015; Siegel, 2014). In sales contexts, the TPC model has been used to define the consequence of technology usage on the ISP of firms (Chan, Huff, Copeland & Barclay, 2016; Good & Stone, 2000).

### **2.3 Literature review of DMCs and ISP of SBGFs**

In order to comprehend the concepts under the thesis much better, the study reviewed related works on digital channels and the ISP of firms. The empirical evidence provides mixed results on the impact of digital marketing on the international sales

performance of firms. To start with, [Gabrielsson and Gabrielsson \(2011\)](#) examined internet-based sales channel strategies of born global firms in Finland. They indicated that the current changes in technology and the internet have had a significant impact on the global marketing environment. This phenomenon has resulted in the development and usage of multiple sales channel and their alternatives.

According to [Gabrielsson and Gabrielsson \(2011\)](#) born global firms are at the forefront of this development because they normally employ electronics-based outlets. More importantly, most of these born global firms utilize both internet and traditional sales channels. Their study described and analyzed the composition and improvement from a single towards several sales channels. Through a multiple case study procedure, they investigated 35 cases through the development of three independent factors namely globalization manner, market composition, Internet appropriateness, and long-term network relations. They found that Internet-centered various sales channels showed to be common to born globals that had reached a higher globalization degree than in those which are at an early stage. Also, the relationship development with small local channels remains significant when Internet sales outlets are used. However, their study did not consider a moderator, not to mention the effect IEO may have on the international sales performance of the firms that use digital marketing channels.

Also, [Nuseir and Aljumah \(2020\)](#) investigated the function of digital marketing on business accomplishment in the SME sector of the United Arab Emirates using a quantitative method. They considered the environment to be a significant factor in business performance. However, the study did not take into consideration the IEO of the firms concerning innovativeness, proactiveness, and risk-taking ability. The study did not observe any moderation with regard to the boosting impact of ecological factors on the relationship between digital marketing and performance.

[Omar et al. \(2020\)](#), on the other hand, considered digital channels that improve the performance of SMEs through the use of quantitative techniques by employing

cross-sectional data. They employed multiple regression analysis and Pearson product-moment association to analyze the data. They found out that there is a vital relationship existing between product advertising, reputation, and the business performance of entrepreneurs of SMEs. Additionally, their findings indicated that digital channels have a significant impact on business success and development. Even though they did not consider the moderating role of IEO; existing literature, shows that employees' IEO such as innovativeness, proactiveness, and risk-taking ability can help enhance the ISP of firms (Amo, 2017; Sinha & Srivastava, 2016).

Conceptually, most business managers currently employ an internet marketing strategy to sell their goods and services, because of its cost-effectiveness coupled with mass customers' reliance on that to make purchase decisions (Suleiman et al., 2020). Suleiman et al., (2020) study focused on how companies can deploy digital channels to improve their business performance by analyzing various marketing strategies that firms can utilize. Concerning problems arising from virtual space usage in marketing Suleiman et al., (2020) mentioned security and privacy issues, and non-face-to-face communication as some of the challenges.

Bhardwaj and Bordoloi (2020) reported that digital marketing has an impact on the way producers and buyers interact with each other, especially, in the context of business decisions. Their study examined how digital marketing influences clients purchasing attitudes. Similarly, international entrepreneurial orientation factors were not considered, even though it is the human capital of the firms that must implement the digital marketing system of the firm. The outcome of their research suggests that technological development is very dynamic such that digital marketing greatly influences the business fraternity.

Dunakhe and Panse (2021) also researched how digital marketing influences the business arena for eight years time horizon. They employed the "Scopus database"



to look for various articles published on the same topic. According to them, it has been concluded by many researchers that digital marketing has an impact on how customers make their final purchase decisions and the type of firms they like due to good brand image and better customer services. Methodologically, Dunakhe and Panse used a theoretical approach, and no primary data were collected for the study. Specifically, a bibliometric review conducted provided clear evidence that digital marketing is replacing the normal traditional face-to-face marketing.

According to Dwivedi et al. (2021), electronic platforms greatly influence consumer and producer purchase and sales decisions and entire business operations. The study of Dwivedi et al. (2021) affirmed other researchers' findings regarding the impact of social media marketing and digital platforms on firms' performance. The researchers' viewpoint provides a comprehensive narrative on appropriate business strategies that can contribute to business growth. Their work supports the argument that digital marketing is gaining popularity as a result of its contribution to the sales of firms.

Yongvongphaiboon and Chantamas (2021) also investigated the essence of digital marketing communication and customer relationship management and how 'social trust and customer trust' may result in companies' clients' loyalty in the construction steel firm' in Thailand. The findings indicated that there is a significant relationship between customer involvement or interactions and digital marketing communication. Yongvongphaiboon and Chantamas' study focused more on the customers without considering the views of the management, not to mention the moderating role of IEO in boosting the impact of digital marketing communication on performance. **Table 2.1** is used to briefly present other empirical studies reviewed, with regard to digital marketing channels, IEO, INVs, and international sales performance.

**Table 2.1** Literature Review of DMCs, ISP, INVs, and IEO

Article	Research Question /Objective	Method	Theoretical Contribution
Gabriels-	What are the types of	Multiple case	Relationship development with

son and Gabrielson (2011)	internet sales outlets tactics that born globals can deploy? What are the factors that influence the use of internet sales channels tools of born globals	study	small local channels is vital when internet sales are deployed.
Knight et al. (2004)	What are the key drivers of product quality in born-global firms?	Quantitative	Born-global performance is enhanced in the wake of managerial emphasis on the foreign customer. Product differentiation strategies also play important roles, particularly in US firms.
Tanner and Shipp (2005)	To examine the effects of two factors (communication style and adaptive selling behavior) use on relationship quality and sales performance of large life insurance companies in Singapore.	Mixed method Both qualitative and quantitative approaches	Positively used sales technologies affect sales performance because the salesperson's use of an interaction-oriented communication style increases.
Zhou et al. (2010).	What is the association between early internalization and proactiveness of management of firms?	Quantitative	During early internalization, start-ups can gain more knowledge to be competitive in their business operations.
Zou and Ghauri (2010)	Does high tech start-up firms in China depend on step-by-step internationalization model?	Qualitative and inductive	High tech start-up firms do rely on the gradual process of internalization, although the strategy is very vital.
Gelderman (2009)	How are digital marketing channels affect the international sales performance of global firms?	Quantitative	International sales performance could be improved at the expense of diminished global customer relations in the long run.
Andersson (2011)	How can effectuation theory enhance the internationalization process born in global firms?	Explorative case study	The entrepreneurial experience of the founders born globals is vital during the internalization process.
Gerschwinski et al. (2015).	What are the determinants of performance of born global firms?	Both (Quantitative and Qualitative)	Product/service quality and competitor orientation are critical drivers of international performance for born globals.

<a href="#">Escandon-Barbosa et al. (2019).</a>	Does the export performance of born globals affect their international orientations?	Quantitative Structural equation model	Export performance greatly influences when born globals are going to the foreign market but it depends on the innovative competencies of the firm.
<a href="#">Ahituv and Gilad (2004)</a>	How does the deployment of information systems and information technology influence the international sales performance of firms?	Quantitative	The use of information systems (IS) and information technology by international (IT) firms contributed to the sales performance of international firms.
<a href="#">Gull et al. (2021)</a>	To what extends do International entrepreneurial orientation (IEO) predict the utilization of export promotion programs (EPPs) that are associated with international performance firms?	Quantitative	Both IEO and export promotion programs (EPPs) are very significant factors in-network relationship building of firms. Additionally, The network relationships and utilization of EPPs fully mediate the effect of IEO on international performance.

## 2.4 Conceptual framework hypothesis development

The conceptual model of this study links key variables to explain how smaller born global agricultural firms' usage of DMCs affects international sales performance of the firms, taking into consideration the moderating role of IEO of the firms. From the literature review, it is apparent that DMCs improve the ISP of firms significantly ([Gull et al., 2021](#); [Hunter & Perreault, 2012](#)). That is, digital marketing may have a strong positive relationship with ISP. Also, the argument of TPC shows that with appropriate adoption/adaption of sales technology, firms will be able to increase their sales performance significantly, all other things being equal.

These assertions are consistent with the argument of [Tanner and Shipp \(2005\)](#) who examined the effects of two factors (communication style and adaptive selling

behavior) use on relationship quality and sales performance of large life insurance companies in Singapore. The findings that emerged from [Tanner and Shipp's \(2005\)](#) study supported the assertion that sales technologies use positively affects sales performance. It also provided several key insights that showed that sales technologies use positively affects a salesperson's interaction-oriented communication style. This in turn positively affects the relationship quality between the salesperson and the customer which results in superior sales performance. This means the usage of digital marketing channels may consequently result in a significant expansion in the ISP of firms. Therefore, it is anticipated that as globalization increases, smaller-born global agricultural firms in Ghana will increasingly use various forms of digital marketing channels to help boost their international sales. The first assumption of the study is, therefore, as follows:

**H1.** *The usage of digital marketing channels has a statistically significant positive influence on the international sales performance of smaller-born global agricultural firms.*

Research on the relationship between digital marketing and international sales performance is generally minimal. Extant empirical evidence, however, has generally shown a positive link between digital marketing and the output of international sales. Adopting a quantitative research design, [Churchill, Ford, Hartley, and Walker \(2010\)](#) found that adopting appropriate technology has a strong and positive relationship with sales performance. The study suggests strongly the significant role of appropriate technology usage in enhancing ISP of firms. In line with the first assumption, it may also mean that the usage of digital marketing channels has a significant relationship with IEO and international sales performance of smaller born global agricultural firms in Ghana respectively.

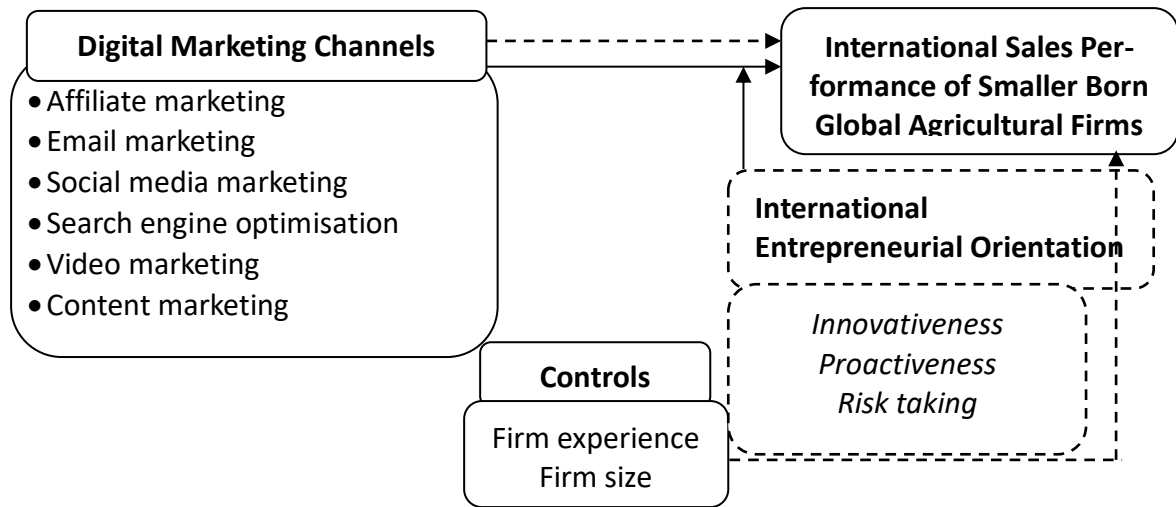
The result of [Ahearne et al., \(2011\)](#) study also supported the assertion that firms who can integrate technology tools into their activities can significantly improve their ISP.

Similarly, the indicated assertions are in line with the argument of [Maundu \(2020\)](#) regarding the research he conducted in Kenya about the influence of digital marketing and the performance of petroleum firms. He concluded that digital marketing channels played a significant role in expanding the sales performance of petroleum firms. Furthermore, the findings showed that email marketing and search engine optimization could help contribute immensely towards the building of brand image, firm reputation, and establishing quality customer relationships. This may mean that international entrepreneurial orientation such as innovativeness, proactiveness, and risk-taking ability of firms has a significant relationship with their usage of digital marketing channels and international sales performance ([Afriyie et al., 2020](#); [Amo, 2017](#); [Boso et al., 2017](#); [Gabrielsson & Gabrielsson, 2011](#)). On the basis of these assertions, the study postulates the second and third arguments of the study as follows:

**H2.** *International entrepreneurial orientation has a statistically significant positive relationship with ISP of smaller-born global agricultural firms.*

**H3.** *The usage of DMCs has a statistically significant positive relationship with IEO of smaller born global agricultural firms in Ghana.*

The earlier argument that the usage of digital marketing channels has a statistically significant positive influence on the international sales performance of smaller born global agricultural firms in Ghana may mean that the influence may be direct. However, some arguments and research findings may mean that the influence can become more potent and stronger when international entrepreneurial orientation such as proactiveness, innovativeness, and risk-taking ability of the firms are considered ([Afriyie et al., 2020](#); [Ahearne et al., 2011](#); [Hunter & Perreault, 2012](#)). This means the influence can be direct or indirect as explained by the Conceptual Framework of the current study below (See **Figure 2.2**).



**Figure 2.2:** Influence of DMCs On International Sales Performance  
Source: Author's construct, 2021

**Figure 2.2** above shows the linkages between the study variables indicating that the independent variables (affiliate, email marketing, and others) may have a direct or indirect influence on the dependable variable ISP. However, the impact may become stronger when IEO competencies (innovativeness, proactiveness, and risk-taking ability) are considered. However, the ISP of the firm can be increased or decreased by the controls, irrespective of the influence DMCs have on ISP.

In line with the assumption of TPC theory which emphasizes the importance of technology utilization and task-technology fit as pre-requisites for a positive impact of technology on firms' sales performance (Goodhue & Thompson, 1995), the study treated the use of digital marketing channels as the independent variable while international sales performance was treated as the dependent variable. International entrepreneurial orientation was treated as a moderator. The theory recognizes that technology must be used to fit the assigned tasks in order to deliver a positive performance effect. It is important to note that when using digital marketing channels, firms' ability to demonstrate a meaningful level of international entrepreneurial orientation such as innovativeness, proactiveness, and risk-taking ability is usually very vital when firms are moving to the foreign market to expand their market share. This

may suggest that the smaller born global agricultural companies are able to demonstrate a meaningful level of international entrepreneurial orientation, all other things being equal, the higher their ability to increase their international sales performance as a result of their adaption of appropriate digital marketing channels (Boso et al., 2017; Escandon-Barbosa et al., 2019; Gull et al., 2021; Jain & Ali, 2014).

According to Nuseir and Aljumah (2020), technological developments, such as the utilization of digital implementations, often help the management of firms connect with their potential and existing customers at a low cost irrespective of their current resource capability. That means that customers can easily obtain all the necessary information they require regarding the kind of products and services through appropriate various digital platforms. Considering the research done by Nuseir, and Aljumah (2020) about the association that exists between managers of information technology and owners of SMEs in the UAE by considering business environment and performance. Nuseir and Aljumah (2020) considered the environment to be an essential factor in business performance. However, the study did not take into consideration the dimensions of the IEO of the firms. Nevertheless, the research was considered the moderating effect or environmental issues to scrutinize the observed confirmation between digital channels and business performance. Omar et al. (2020) also found that company reputation and brand influence relationship with the business performance of the entrepreneurs of SMEs. Even though the indicated studies did not consider the moderating role of IEO such as innovativeness, proactiveness, and risk-taking ability of firms; literature, however, shows that these factors can help enhance the influence digital marketing systems have on the sales performance of firms (Amo, 2017; Sinha & Srivastava, 2016). Hence, the fourth assumption of the study is as follow:

**H4.** *IEO is able to moderate positively the influence the usage of DMCs has on ISP of smaller born global agricultural firms in Ghana.*

Furthermore, the study postulates that the usage of digital marketing channels influences the ISP of firms. However, this influence becomes stronger if the companies could establish a substantial magnitude of IEO such as proactiveness, innovativeness, and risk-taking ability. Nevertheless, the study assumed that these dynamics can be boosted by some controlling variables such as firms' years in business, size, and several employees (Afriyie et al., 2020; Amo, 2017; de Jong, Parker, Wennekers & Wu, 2019; Lazányi, Virglerová, Dvorský & Dapkus, 2017; Yongvongphaiboon & Chantamas, 2021). This is so because entrepreneurial behaviors and activities within an organization are not only influenced by internal antecedents that can reinforce firms' decisions to be innovative, proactive, and engage in risk-taking (Afriyie et al., 2020).

Some studies (Afriyie et al., 2020; Lazányi et al., 2017) conducted in different socio-cultural contexts have found that consistently, large and medium firms have demonstrated higher usage of digital marketing channels, and ISP compared to smaller and micro firms. Number of years in business or operation is another significant control of corporate entrepreneurship. Turro Sol (2016) posits that the number of years in business has a substantial effect on corporate entrepreneurship, with this association being advantageous to younger firms. Thus, smaller companies have the great opportunity to be innovative, proactive, and make risky investments that could contribute to their future growth (Lazányi et al., 2017).

One plausible explanation for why younger and smaller firms may experience higher corporate entrepreneurship could be that their prospects are high. Therefore, they are poised to be more proactive at exploiting new and international opportunities and incubating innovative ways of doing business. However, older and large firms may perceive their duration at the organization as limited, and therefore, may want to play it safe. Subsequently, they become comfortable operating in the old system which they are accustomed to, and therefore, less likely to be receptive to risk-taking and to be innovative to explore international opportunities. In line with these, the study makes the following assumption or hypothetical statement to be tested.



**H5.** *Smaller-born global agricultural firms' number of years in business/operation has no statistically significant effect on their international sales performance.*

Furthermore, the evidence available suggests that firms with longer organizational tenure and a large number of employees tend to be most likely to adopt entrepreneurial behaviors (de Jong et al., 2019; Unger et al., 2011). Importantly, firms with a meaningful level of experience with a large number of employees turn to become more aware of their specialty and gather enough knowledge and competence necessary for exploiting new and international opportunities, generating innovative ideas, and taking risks (de Jong et al., 2019). However, firms with shorter tenure and a small number of employees may not have accumulated enough knowledge and experience, and therefore, may be less probable to get involved in corporate entrepreneurship, usage of digital marketing channels, and international sales. In line with the argument raised, the study again makes the following postulation:

**H6.** *Number of employees (Firm size) of smaller-born global agricultural firms in Ghana has no statistically significant effect on their international sales performance.*

As indicated in **Figure 2.2**, the model provides a more holistic framework in understanding the relationship between digital marketing channels and the international sales performance of smaller-born global agricultural firms. The study argues that when the firms employ appropriate digital marketing channels in their marketing drive, all other things being equal, it will lead to an increase in their international sales performance (Ahearne et al., 2011; Hunter & Perreault, 2012; Maundu, 2020). However, this influence becomes more potent when the firms are able to develop and nurture a high level of international entrepreneurial orientation such as innovativeness, proactiveness, and risk-taking ability (Gull et al., 2021; Jain & Ali, 2014; Müller et al., 2018). Nevertheless, these dynamics can be thwarted or boosted by controls such as the years of experience and size of the firms.

### 3 Research Methodology

This chapter explains how the study was conducted, the data collection approach, and the procedure used to analyze the data. It also discusses the different techniques employed in gathering necessary data to address specific objectives of the study under various sub-headings in the subsequent sections.

#### 3.1 Research Approach

This study employed a cross-sectional survey design with the quantitative approach in order to utilize a quantitative standpoint of exploring reality. A cross-sectional survey design entails the collection of data where a specific population is sampled to make inferences about the population of interest at a specific period ([Creswell & Creswell, 2018](#)). The adoption of this approach helped me collect quantitative data that provided general patterns and width of the study. Also, adopting this design created room for me to analyze digital marketing channels and international sales performance of smaller born global agricultural firms in Ghana in the natural settings of owners/managers of these firms to integrate the issues in terms of the meanings they give to them.

According to [Gravetter and Forzano \(2006\)](#), our philosophy and worldview of reality are the foundation on which we design research. The philosophical orientation of the study in the context of pursuant of the virtues of actuality and verity was based largely on the ideas of positivists' paradigm. Thus, understanding digital marketing, IEO, and ISP of smaller born globals require the general perspective from which the society agrees to such reality ([Creswell & Creswell, 2018](#)).

The area of the study focused on two coastal regions of Ghana namely, Western and Central, that is, Cape Coast and Sekondi-Takoradi Metropolises. According to Ghana

Statistical Service (GSS, 2020), most of the born global agricultural firms can be found in these regions (NBSSI, 2020). Therefore, it is justifiable to use smaller born global agricultural firms in the study because they are the majority and more accessible.

### 3.2 Population and Sampling Procedure

Registered SMEs recognized by NBSSI and Association of Ghana Industries (AGI) in the two Metropolises were the main population of the thesis. Registered SMEs were considered because they appear more visible, organized, and well-structured and lend themselves to some tenets of digital marketing and internationalization. Within the context of Ghana, the available registered small-born globals in Ghana are classified as SMEs (NBSSI, 2019; GSS, 2021). According to existing study specifically NBSSI (2019) and GSS (2021), the operationalization use to define a born global is that such firms should have 25% or above of their products and services being traded at the foreign market at least after nine years of its inception, coupled with having 25 percent of total revenue from other international markets (Hashai & Almor, 2004).

All owners/managers of these SMEs formed the study population. Current records show that there are 2,592 registered and active SMEs in the two Metropolises, of which 97 are registered as smaller-born global agricultural firms (GSS, 2021). This shows that the accessible population of the study was 97 owners of smaller born global agricultural firms in the two Metropolises. The owners/managers of these firms were considered because they are more involved in the issues of digital marketing and the international sales performance of their respective firms.

The census technique was the method used to collect the data for this thesis. According to Hayne (1949), in this approach, all the units of the population or data are taken into consideration. This method was deemed suitable and practicable since the sum of owners/managers of smaller born global agricultural firms in the two

Metropolises was relatively small. Again, the census was necessary since the owners/managers of the firms were quite different from each other (Cohen, Manion & Morrison, 2018).

Additionally, the number of owners of the firms in the study is small and less than 100, which made it possible to employ the census method to capture the 97 owners of smaller born global agricultural organizations in the two Metropolises.

The data were collected within two months between October 2021 to the first week of December 2021 with help of six field assistants. Initially, the respondents were contacted through emails and phones to seek their consent and suitability for data collection. Specifically, during the email and phone conversation, the respondents were asked to answer four main questions to determine if these firms have international sales and the geographical locations of such countries, and the year of establishment. Other criteria employed to determine if the firms were thoroughly born globals was to find out if they have at least 25 percent of total revenue from the international market or have at least 75 percent foreign sales within nine years of their operations (Hashai & Almor, 2004; Knight & Cavusgil, 2005).

All the 97 firms contacted were found eligible based on their answers and criteria used to determine born globals in this study. Afterward, emails were sent asking them the appropriate time and date the field assistants could contact them with the survey for their responses. Subsequently, the field assistants were deployed who were able to collect 84 (86.6%) of the data. Thus, 13 owners/managers rejected the survey during the personal visit by the field assistants. Therefore, out of the 92 respondents, 84 of them were able to answer the survey making the response rate of 86.6% of the study. Out of the 97 owners/managers, 61 (62.9%) of them were males while 36 (37.1%) were females.

### 3.4 Data Collection and Analysis

Structured questionnaires were constructed, composed of close-ended items which were employed to collect the data. The language of the questionnaire was English, and it was divided into six sections (A to F), as indicated in the appendix section. Sections A and B were used to collect data on background characteristics and degree of internationalization respectively. Also, section C was used to collect data on digital marketing channels employed by the firms while section D was used to collect data on the reasons for using digital marketing channels. As indicated in **Figure 2.2**, multiple digital marketing channels were used, and the items were adapted from the works of Müller et al. (2018), Appel et al. (2020), Maundu (2020), Omar et al. (2020), Dunakhe, and Panse (2021), Dwivedi et al. (2021), and Yongvongphaiboon and Chantamas (2021).

Also, sections E and F were used to collect data on international entrepreneurial orientation and international sales performance of the firms respectively. In relation to international entrepreneurial orientation, three main components were considered: innovativeness, proactiveness, and risk-taking ability. These components were adapted from the works of Wiklund and Shepherd (2005), Bouchard and Basso (2011), Jain and Ali (2014), Onyema (2014), Sinha and Srivastava (2016), Boso et al. (2017), Escandon-Barbosa et al. (2019), Schachtebeck et al. (2019), Afriyie et al. (2020), and Gull et al. (2021). Furthermore, multiple items were formulated, based on sales and marketing performance indicators, to measure the ISP of the companies. These items were rephrased from existing research in a similar context by Ahearne et al. (2011), Hunter and Perreault (2012), and Yongvongphaiboon and Chantamas (2021). Responses to the items, with regard to sections C, D, E, and F were based on a seven-point discrete scale that was measured numerically as presented in the Appendix. The item adaptations were made in order to contextualize the issues as they pertain in Ghana concerning smaller-born global agricultural firms.

Both descriptive and inferential statistical tools were utilized to analyze the data. Specifically, frequency, percentage, mean, standard deviation, Pearson Product moment correlation, and hierarchical multiple regression analysis that makes use of [Hayes \(2018\)](#) moderation analysis and One-way analysis of variance (ANOVA) was employed to analyze the data that helped to answer the stated specific questions and to verify the formulated hypotheses.

### **3.4 Ethical Considerations**

The study was subjected to ethical clearance issues in the world of science. Proof of ethical clearance was given to AGI and NBSSI to seek their permission and consent to use the selected subjects. After permission was given, the selected respondents were given the paper that outlined the purpose of the thesis and they were assured that there will be no risks associated with participating in the study. Consents of the owners/managers of the firms were also attained. In addition, respondents were made aware that the results of the study would remain confidential, their privacy would be protected at all times, and that they would have the right to remain anonymous. The respondents were also made aware that any information about the study released would be in aggregate without individual firm identification.

### **3.5 Reliability and Validity**

The dependability of the study relies on validity and reliability. Thus, a Pre-test of the questionnaire was conducted in the Tema Metropolis in Ghana to measure their validity and reliability. Owners/managers of firms in Tema were chosen since they exhibit similar features as those in Cape Coast and Sekondi-Takoradi Metropolis ([Cohen et al., 2018](#); [Jain, 2019](#)). With regard to validity, the researcher verified that the objects in the questionnaire covered the area that was intended to evaluate

concerning digital marketing channels, international entrepreneurial orientation, and international sales performance. They helped in paraphrasing and modifying items that were considered inaccurate.

With regard to face validity, it was granted by my colleagues and some owners/managers of born global agricultural firms in Ghana. Also, construct validity was conducted by verifying questionnaires related to the theoretical constructs that they purport to measure. Besides, a factor review was also carried out to ensure the construct validity of the questionnaire. Items with eigenvalues greater than one were extracted, and items with a correlation coefficient below  $\pm 0.3$  were removed to clear any doubt that may arise from analysis (Pallant, 2010; Sarstedt & Mooi, 2019). Initially, the instruments involved 72 close-ended objects, but after the factor analysis, it was reduced to 67 in the final version.

The researcher employed a Cronbach's alpha reliability coefficient to determine the internal uniformity of the questionnaire by using the Predictive Analytics Software. The Cronbach's alpha dependability value generated indicated that the several scales were reliable per the suggestion of Darren and Mallery (2014) implying the acceptability of the scales. This was done using the Test Analytics for Surveys (TAFS), a tool of PASW Version 21.0, that is normally employed in coding data and examining quantitative feedback to close-ended items. The coefficients generated for digital marketing channels, international entrepreneurial orientation and international sales performance as variables were .798, .877, and .812 respectively. Previous research has established the fact that Cronbach's alpha coefficient of .70 or above is often regarded to be good (Pallant, 2010).

## 4 Results and discussion

This part of the report presents the interpretation of the research findings. This part of the paper comprises two main sections. First, the background characteristics are discussed and later examine the feedback obtained from respondents based on the research questions and hypotheses. As indicated under methodology, only smaller born global agricultural firms that make use of digital marketing channels were considered.

### 4.1 Background Characteristics

This sub-heading presents the distributions of interviewees' background characteristics such as year of foundation, highest level of education, gender, age, number of years in business, number of employees, estimated annual expenditure, and sales. The section further presents the distribution of the degree of internationalization. The results are presented as follow:

**Table 4.1** shows results regarding respondents' background characteristics such as gender, age, and highest educational level. As contained in the table, 64.3 percent of the respondents were males while 35.7% were females. Based on this finding the total number of male owners/managers of smaller born global agricultural firms that use digital marketing channels and are operating in Ghana outnumbered that of female owners/managers of the same firms. This may mean that male entrepreneurs have a higher level of drive to go international as compared to female entrepreneurs as perceived in Ghanaian society. Registered smaller born global agricultural firms operating within the formal sector, and they were those that the current study considered.



**Table 4.1:** Distribution of Respondents' Gender, Age, and Level of Education

Variables	Scale	Frequency (No.)	Percent (%)
Gender of respondent	Male	54	64.3
	Female	30	35.7
Age of respondent	18 – 26 years	3	3.6
	26 – 35 years	30	35.7
	36 – 45 years	28	33.3
	46 – 55 years	17	20.2
	56 years and above	6	7.2
Highest educational level of respondent	Secondary	22	26.2
	Tertiary	62	73.8

Source: Field Data, 2021

(N = 84)

Anecdotal reports on the issue of gender and industrialization in Ghana show that most women prefer to work within the informal sector as compared to the formal sector and that as a sector becomes more formal in the quest to go international, the more they leave that sector for 'men'. [Adu-Darko \(2017\)](#) blamed this gender gap on the differences in the level of education of males and females in Ghana. As a result, one does not perceive such a high level of gender difference between Ghanaian workers and entrepreneurs. This finding is inconsistent with the current expectation of the government and the people of Ghana which is to see female workers, managers, and entrepreneurs closer to shoulder with their male counterparts in all sectors.

Concerning the age group of the respondents, the results in **Table 4.1** show that more of them were within the age groups of 26 – 35 years (35.7%), 36 – 45 years (33.3%), and 46 – 55 years (20.2%) respectively. Only 3.6% percent of the participants indicated that they were between the ages of 18 – 26 years. This shows that most of the owners/managers of the firm were within the youth age group (18 – 45 years) in Ghana since they were less than 46 years. This is a good sign for the firms/enterprises since

they have more time to work before they go on compulsory retirement. This is a reflection of the Ghanaian population which is dominated mostly by a youthful age between 18 – 45 years (GSS, 2020).

In addition, as indicated in **Table 4.1**, a large chunk (73.8%) of the interviewees' highest level of education was at the tertiary level while 26.2 percent was at the secondary level. None of the owners/managers' highest level of education was below the secondary level. This means, all the respondents were literate, as a result, they were in a better position to read and write in the English language. This justifies using the questionnaire since the respondents were literate. The result may mean that one may require a meaningful level of experience, IEO, and capital to be a manager/owner of a smaller-born global agricultural firm in Ghana. This indicates that Ghana has made good progress towards increasing access to education and narrowing the illiteracy gap among workers and entrepreneurs (GSS, 2020).

Furthermore, the findings from **Table 4.1** mean that a significant number of the respondents had some level of formal education, as a result, they could develop the potency to acquire the requisite corporate entrepreneurship knowledge, skills, and competencies needed to be productive in the sector. Receiving higher education has been associated with higher odds of developing entrepreneurial behaviors within a firm (Adu-Darko, 2017). This situation can reflect in the development of international entrepreneurial orientation drives such as proactiveness, innovativeness, and risk-taking ability. Analogous to this, Afriyie et al. (2020) also found in their study that employees who reported to have University education were more likely to engage in corporate entrepreneurship compared to those with lesser levels of education.

Furthermore, when asked to indicate the sector the various firms/enterprises are operating, all the owners/managers of the firms indicated the agricultural sector. As presented under methodology, only smaller born global agricultural firms in Ghana that make use of digital marketing channels, and which have 25% international sales

were considered. Other criteria were used to ensure they were born global firms; they were asked to indicate total sales in other geographical areas and the continent. The results are presented in **Table 4.2**. From this table, more (34.5%) of the firms' foundation year was between 2005 – 2009, while the foundation years for 25 percent and 22.6 percent of the firms were between 2010 – 2014 and 2015 – 2019 respectively. Cumulatively, only 15 (16.9%) of the firms' year of foundation was before 2005. In relation to the size of the firms, [NBSSI's \(2020\)](#) criterion for classifying SMEs was used. That is, the number of permanent employees working in the firm.

**Table 4.2:** Characteristics of Born Global Agricultural Firms Considered

Variables	Scale	Frequency (No.)	Percent (%)
Year of foundation	1995 – 1999	5	6.0
	2000 – 2004	10	11.9
	2005 – 2009	29	34.5
	2010 – 2014	21	25.0
	2015 – 2019	19	22.6
Current number of permanent employees (Size)	Less than 6 (Micro)	2	2.4
	6 - 9 (Very small)	10	11.9
	10 - 29 (Small)	36	42.9
	30 - 59 (Medium)	30	35.7
	Above 59 (Large)	6	7.1
Yearly expenditure (\$) Estimate	Less than 5,010	13	15.4
	5,010 – 25,000	29	34.5
	25,010 - 50,000	24	28.6
	50,010 - 100,000	12	14.3
	100,010 - 500,000	5	6.0
	1,000,010– 2,000,000	1	1.2
Yearly sales estimate (\$)	Less than 5,010	7	8.3
	5,010 – 25,000	31	36.9
	25,010 - 50,000	13	15.5

50,010 - 100,000	12	14.3
100,010 - 500,000	20	23.8
500,010 - 1,000,000	1	1.2
Source: Field Data, 2021		(N = 84)

As indicated in **Table 4.2**, most of the firms' permanent employees were 10 – 29 (42.9%) and 30 – 59 (35.7%). This shows that most of the firms were small and medium scales. However, 7.1 percent and 2.4% were large and micro firms respectively. The views of the owners/managers of the various firms concur with the assertion of [NBSSI \(2020\)](#) which indicates that most SMEs in Ghana are small-scale enterprises. The findings indicate a positive industrial environment in Ghana because current records show that a large number of people employed in Ghana are from small and medium scale enterprises ([GSS, 2020](#)). It is, therefore, good to know that most of these firms are actively involved in the international business environment.

Further data were collected on the annual expenditure of the firms as presented in **Table 4.2. S** hows that (15.4%) of the firms' annual expenditure estimate was less than \$5,010. Similarly, more of the respondents indicated that their respective firms' yearly sales estimate ranges between \$5,010 - \$25,000 (36.9%), \$100,010 - \$500,000 (23.8%), \$25,010 - \$50,000 (15.5%), and \$50,010 - \$100,000 (14.3%). The results show that the annual estimated expenditure and sales of medium and large-scale born global agricultural firms are more than those of micro, very small, and small scale firms respectively. These findings are consistent with that of [Adu-Darko \(2017\)](#), and [Afriyie et al. \(2020\)](#), who all indicated that the yearly estimated expenditures and sales of micro, and small-scale firms are lesser than that of medium and large-scale firms. The subsequent discussions focus on results relating to the four research questions and four hypotheses. The study made use of both descriptive and inferential statistical tools to analyze the data. The results are as follows:

## 4.2 DMCs Used by Smaller Born Global Agro Firms

The rationale of the first research question was to examine the digital marketing channels used by smaller-born global agricultural firms in Ghana. Data on the items were obtained using close-ended items that were measured numerically using a seven-point discrete scale measure. Based on the scale used, the average response score was interpreted using mathematical approximation. The categorization was done based on the recommendation of [Sarstedt and Mooi \(2019\)](#) concerning the explanation of descriptive statistics. The results are presented in **Table 4.3**.

**Table 4.3:** DMCs Used by Smaller Born Global Agricultural Firms

Items/Statements	Mean	SD
My firm often display its products and services online	5.429	1.515
Our foreign customers prefer buying/shopping on our online sites as compared to the conventional channels	5.298	1.573
My firm's affiliate network attracts much traffic	4.429	1.491
Our affiliate network offers quality customer supports	4.941	1.819
Our email marketing strategy delivers highly relevant content to subscribers' inboxes in a non-invasive way	5.441	1.608
Through an email newsletter, my firm can engage its foreign customers or potential customers of upcoming events and new product offerings	5.548	1.616
My firm can use social media platforms to amplify brand awareness	5.536	1.500
Usage of social media has made my firm to be more accessible to our foreign customers	5.559	1.467
My firm is able to use search engine optimization (SEO) to streamline our international campaigns	5.262	1.672
We are able to optimize results through the use of our SEO	5.048	1.307
We are able to build global brand awareness using our video marketing strategy	5.417	1.381
My firm edges out its competitors' videos in order to improve our international advertising techniques	5.619	1.297
My firm's global content marketing strategy focuses on our consumers' needs first before that of the firm	5.655	1.217

My firm's content marketing is informative and valuable to our target global audience	5.691	1.396
My firm relies on its global customers' recommendations of their brand to inspire other customers to make purchases	5.738	1.440
Mean of means (Digital marketing channels)	5.374	.334

Source: Field Data, 2021      *Where SD = Standard Deviation*      (N = 84)

First, looking at the values for the standard deviation in Table 4.3, one can aver that they are moderate and closer to each other, which means they are non-dispersed distribution. The standard deviations exhibiting quality being moderate and preventing extremes indicate that the views of the owners originate from a diverse group with the same features. As indicated in **Table 4.3**, interviewees accepted that their respective firms often display their products and services online (Mean = 5.429, SD = 1.515). Again, respondents agreed that their foreign customers prefer buying/shopping on their firms' online sites as compared to the conventional channels (Mean = 5.298, SD = 1.573). However, concerning firms' affiliate network, respondents were uncertain as to whether it attracts much traffic (Mean = 4.429, SD = 1.491); even though they agreed that the affiliate network of their respective firms offers quality customer supports (Mean = 4.941, SD = 1.819). Also, respondents agreed that the email marketing strategy was effective inboxes in a non-invasive way (Mean = 5.441, SD = 1.608). Similarly, respondents agreed that through an email newsletter, their firms are able to engage their foreign customers or potential customers of upcoming events and new product offerings (Mean = 5.548, SD = 1.616).

Additionally, as shown in **Table 4.3**, interviewees strongly agreed that these firms are able to use social media platforms to amplify brand awareness (Mean = 5.536, SD = 1.500), a situation which has made the firms to be more accessible to foreign customers (Mean = 5.559, SD = 1.467). Again, respondents agreed that the firms are able to use SEO to streamline their international campaigns (Mean = 5.262, SD = 1.672) and also optimise results (Mean = 5.048, SD = 1.381). Also, respondents strongly agreed that their respective firms edge out their competitors' videos in order to improve their international advertising techniques (Mean = 5.619, SD = 1.297). In

addition, respondents strongly agreed that their firms' global content marketing strategy focuses on consumers' needs first before that of the firms (Mean = 5.655, SD = 1.217), and that the content marketing strategies of the firms are informative and valuable to their target global audience (Mean = 5.691, SD = 1.396).

Generally, the results show that the selected smaller-born global agricultural firms in Ghana use all types of online marketing strategies such as email marketing, content marketing, and affiliate marketing, among others (Mean = 5.374, SD = .334). The results show that the most digital marketing channels used by the smaller global agro firms are social media, email, video, and content marketing. Also, the least used marketing channel is affiliate marketing.

The findings are consistent with most researchers that showed that due to current digitalization, most firms are now employing digital marketing strategies to reach their customers (Bollweg et al., 2019; Chen et al., 2020). Currently, almost all firms are adopting digital technology in their business operations, because they are less expensive and could be employed to reach a lot of customers conveniently. Dahiya and Gayatri (2018) reported that this digitalization can be employed to enhance the marketing of goods and services of every company. Similarly, the above claims support the empirical findings of Grewal et al. (2019) who suggested that many modern consumers are opting 'more and more for virtual platforms such as social media, that influence firms to continue to build their brands.

### **4.3 The Degree of Internationalisation of SBAFs**

The second research question focused on analyzing the degree of internationalization of smaller-born global agricultural firms in Ghana. Again, multiple items were used to collect data that helped in answering this question as shown in **Table 4.4**. As indicated in the table, only 5 (6.0%) of the owners/managers of the firms indicated that their

respective firms' number of years in business after establishment or from the foundation is less than seven years.

**Table 4.4:** Respondents' Views on the Degree of Internationalisation

Variables	Scale	No.	%
Number of years the firm has been in business after establishment or from foundation	Less than 7 years	5	6.0
	7 – 11 years	10	11.9
	12 – 16 years	29	34.5
	17 – 21 years	21	25.0
	22 – 26 years	19	22.6
Firm's/enterprise's number of years since first exporting/ being involved in international activity (international experience)	Less than 3 years	4	4.8
	3 – 5 years	18	21.4
	6 – 8 years	26	31.0
	9 – 11 years	20	23.8
	12 – 14 years	12	14.2
	15 years and above	4	4.8
Indicate the current percentage (%) of the firm's targeted sales that are going outside the country (ie, foreign sales)	0 – 20	4	4.8
	21 – 40	14	16.7
	41 – 60	16	19.0
	61 – 80	40	47.6
	81 – 100	10	11.9
Indicate the current percentage (%) of the firm's achieved global or foreign sales	Less than 25%	9	10.7
	25%	12	14.3
	26% – 49%	39	46.4
	50% and above	24	28.6
	Indicate the type of product(s) that your firm/enterprise produces/export/sells?	Sea foods (cat fish, tilapia)	11
Yam/Cocoyam/Potato/Cassava/Plantain		14	16.7
Pineapple/Mango/Orange/			
Pawpaw/ Banana/Pear		21	25.0
Cashew		2	2.4
Natural cocoa powder		7	8.3
Palm oil/Palm nut oil/Palm paste/Groundnut oil/			
Groundnut paste		12	14.2
Shea butter		3	3.6
Wood products (timber, herbs)		14	16.7

Source: Field Data, 2021

(N = 84)



More (34.5%) of the respondents indicated that their firms have been in business for the past 12 – 16 years while 25.0 percent and 22.6 percent indicated that their respective firms have been in business for the past 17 – 21 years and 22 – 26 years respectively. In relation to the firms' international experience, as indicated in **Table 4.4**, more of the respondents indicated that the number of years their respective firms' have been selling their products to the foreign market ranges from 6 – 8 years (31.0%), 9 – 11 years (23.8%), 3 – 5 years (21.4%), and 12 – 14 years (14.2%). However, 4.8% of the interviewees showed that their firms' international experience is less than three years. Similarly, another 4.8% of the participants indicated that their firms' international experience was more than 14 years.

In conclusion, the results show that the preponderance number (90.4%) of the firms' international experience ranges from three years to 14 years. The finding is incongruent with that of [Dunakhe and Panse \(2021\)](#) who researched the effect of digital marketing for time years time horizon. [Dunakhe and Panse \(2021\)](#) indicated that most of the firms had less than 10 years of international experience. However, the finding is congruent with the assertion of [Omar et al. \(2020\)](#), who considered the influence of digital marketing and business performance in Klang Valley.

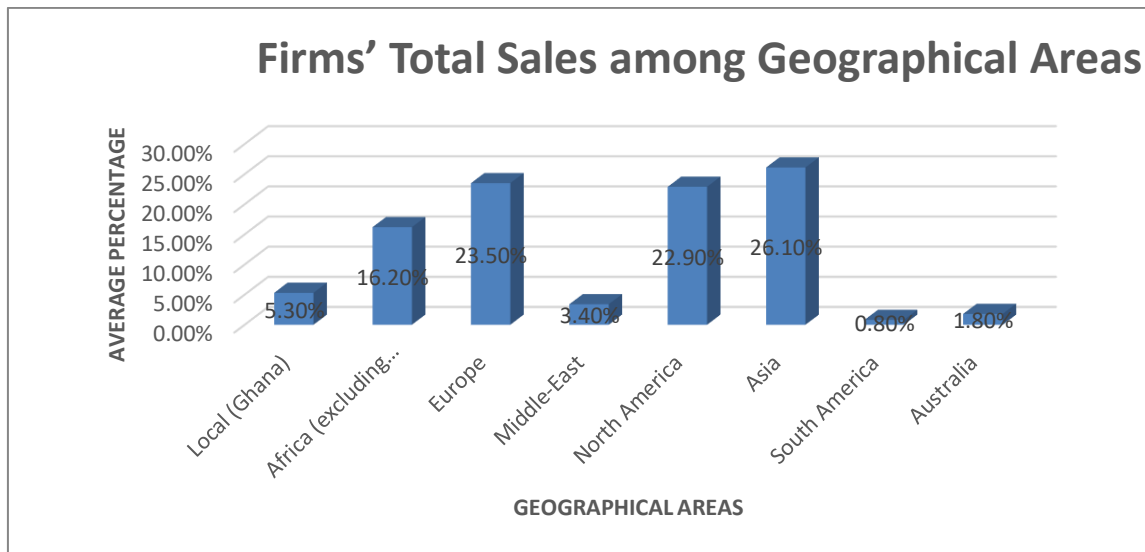
Furthermore, as indicated in **Table 4.4**, the combined percentage shows that the majority (78.5%) of the firms' current percentage of targeted sales that are going outside the country (ie, foreign sales) is more than 40 percent. Only 4 (4.8) of the firms indicated that their foreign sales were less than 21 percent. In relation to the current percentage of the firms' achieved global or foreign sales, 14.3 percent of the firms indicated that their foreign sales was 25 percent while 10.7 percent also indicated that it was less than 25 percent. However, 46.4 percent and 28.6 percent of the respondents indicated that their respective firms achieved global sales were 26% - 49% and above 49% respectively. The 75 (89.3%) respondents who indicated that the current percentage of their firms achieved global or foreign sales was 25% or above,

were further asked to indicate when (year) the firms achieved such sales. Most (76.0%) of them indicated 6 – 8 years ago while 24.0 percent indicated 9 – 14 years ago.

These findings, as indicated, show that most of the firms have some significant level of internationalization with regard to sales. The finding is in line with the assertions of [Dunakhe and Panse \(2021\)](#) whose findings indicated that most smaller born global firms have now had a significant level and experience of internationalization with regard to sales. They added that these firms are able to achieve this as a result of their meaningful adoption of digital marketing tools. According to Dunakhe and Panse, it has been concluded by many researchers that recently digital channels have a positive impact on consumers buying decisions.

In addition, respondents were asked to indicate proportionally, in percentage terms, the total sales of the firm for last year among the various geographical areas. Responses of the 84 respondents were calculated using average scores of the percentages indicated and approximated to single digits for easy classification. On the basis of that, it was easy to know the percentage allocation of total sales of the firms considered in the study. The results are presented in **Figure 4.1**.

As indicated in **Figure 4.1**, more of the interviewees indicated that their respective firms' total sales for last year were from Asia (26.1%), Europe (23.5%), North America (22.9%), and Africa [excluding Ghana] (16.2%). This shows that most of the international sales of smaller-born global agricultural firms in Ghana are from Asia, particularly China, Malaysia, India, and Indonesia. In relation to Africa, most of the respondents indicated countries such as Burkina Faso, Ivory Coast, Togo, Niger, Benin, and Nigeria. In all, deductions from the views of the respondents indicated that the 10 most important international countries smaller born global agricultural firms in Ghana achieved their global or foreign sales are China, USA, Malaysia, United Arab Emirate, England, Germany, Netherland, Burkina Faso, Norway, and Australia.



**Figure 4.1:** Firms' Total Sales among Geographical Areas

The findings that emerged from **Figure 4.1** are in line with the submissions of [NBSSI \(2020\)](#) and [GSS \(2021\)](#) who both indicated most smaller born global agricultural firms in Ghana international sales activities are achieved in China, the USA, Malaysia, United Arab Emirate, England, Germany, Netherland, and Burkina Faso. [GSS \(2021\)](#) added that in relation to cash crops, most of the firms that deal with international sales achieved their sales in China more while regarding fruits and other foodstuffs, United Arab Emirate and Burkina Faso are the countries where the firms achieve their high level of foreign sales.

Participants were further asked to indicate the type of product(s) that their firms produce or sell. As indicated in **Table 4.4**, more (25.0%) of the respondents indicated that their firms are into the production and exportation of fruits such as pineapple, mango, orange, pawpaw, banana, or/and pear. Also, 16.7 percent of the firms were into the production and exportation of agricultural products such as yam, cocoyam, potato, cassava, or/and plantain, and wood products (Eg. Timber and herbs). Again, 14.2 percent and 13.1 percent of the respondents indicated that their firms are into the production/exportation and sales of palm oil, palm paste, groundnut oil, and seafood respectively. Other firms were into the production and sales of natural cocoa powder (8.3%), shea butter (3.6%), and cashew (2.4%). The findings regarding the agricultural

products that the firm's sale internationally are in line with that of NBSSI (2020) and GSS (2021) who both indicated that fruits and other foodstuff, cash crops, shea butter, seafood, and wood products are the most internationally sold products recorded by smaller born agricultural firms in Ghana for the last five years.

#### 4.4 The Level of IEO of SBAGFs in Ghana

The main motive behind the third research question was to establish the level of international entrepreneurial orientation of smaller-born global agricultural firms in Ghana. Each of the components of the questionnaire consists of four close-ended items that were combined using average responses to create the variables. Again, mean and standard deviation were employed to analyze respondents' views on the issue since the distribution was approximately normal (See skewness and kurtosis values in **Table 4.5**). The results are presented in **Table 4.5**. As depicted in the table, owners/managers of the firms perceived their international entrepreneurial orientation (Mean = 5.326, SD = .376) in positive terms. This means the firms are able to utilize their innovation, proactiveness, and risk-taking ability to gain a competitive advantage over their rivals in the international market.

**Table 4.5:** Respondents' Views on the Various Components of IEO of SBAFs

Components of international entrepreneurial orientation	Mean	SD	Skewness	Kurtosis
Innovativeness	5.539	.551	.083	-.776
Proactiveness	5.089	.786	-.229	-.458
Risk-taking	5.351	.735	-.959	.960
Mean of all means (International Entrepreneurial Orientation)	5.326	.376	.117	.785

Source: Field Data, 2021      Where SD = Standard Deviation      (N = 84)

Specifically, as indicated in **Table 4.5**, respondents strongly agreed that the level of their firms' innovativeness (Mean = 5.539, SD = .551) is significantly high. This means the firms can continually develop new products lines to boost global sales that could help them to be internationally competitive. The finding corroborates with the assertion that, for purpose of internationalization, firms must create room for employees to put their creative ideas to work (Ofori, 2009; Afriyie et al., 2020). Smaller-born global firms must, therefore, harness the creative energy of their human capital into a valuable outcome to be more productive.

Furthermore, respondents agreed that their respective firms are proactive (Mean = 5.089, SD = .786) and also are able to take risk (Mean = 5.351, SD = .376). This means the firms need to be proactive always by actively engaging in the global business domain. This shows that smaller-born global agricultural firms in Ghana constantly foreseeing potential international environment changes and future demands ahead of their competitors. Thus, the firms could pursue new international opportunities that could contribute to their business growth in the foreign markets (Rouzies et al., 2016).

In relation to risk-taking, the results may mean that smaller born global agricultural firms do utilize both borrowing and their assets to finance international activities that encourage low levels of financial and personal risk-taking. Similarly, the firms ensure that global risk factors are assessed to minimize uncertainty before investing successfully in the international market (Kumar et al., 2016; Zhou et al., 2010).

Furthermore, the findings on international entrepreneurial orientation are congruent with that of Jain and Ali (2014) who looked at entrepreneurial and intrapreneurial orientation in Indian enterprises empirically. Jain and Ali found that entrepreneurs and intrapreneurs perceived their innovativeness, proactiveness, and risk-taking ability as moderately positive. In general, the findings that emerged from **Table 4.5** corroborate with the assertions of Jain and Ali (2014), Onyema (2014), Sinha and Srivastava (2016), Boso et al. (2017), and Schachtebeck et al. (2019) who all claimed that for firms to

become more internationally competitive, they need to acquire the requisite international entrepreneurial orientation for them to be proactive and receptive to changes, and innovations. The findings are in the right direction since international entrepreneurial orientation is now a crucial issue in international marketing and sales.

#### 4.5 Reasons for Using DMCs by SBAFs in Ghana

The fourth research question looks at the reasons that drive smaller-born global agricultural firms in Ghana to use digital marketing channels. Again, mean and standard deviation were employed to analyze the data. The results are presented in Table 4.6.

**Table 4.6:** Reasons for the Firms' Usage of Digital Marketing Channels

Reasons	Mean	SD
To boost the firm's e-marketing system	5.655	1.217
To develop an omnichannel marketing strategy to engage our different target customer personas globally	5.619	1.298
To reduce the global cost of marketing campaigns of the firm	5.559	1.467
To popularise the firm's image/brand that reflects our targeted global market	5.548	1.616
To resonate the image/brand of the firm globally	5.536	1.501
To popularise the firm's products or services globally	5.441	1.608
For business growth through increase in global sales	5.429	1.515
To support the firm's research and planning globally	5.417	1.381
For purposes of market globalisation or internationalisation	5.298	1.574
To increase our brand awareness globally	5.048	1.307
To attract international customers	4.941	1.819
For market automation or digitalisation	4.429	1.491
The firm's high level of capacity in digital marketing	3.962	1.673

Source: Field Data, 2021

Where SD = Standard Deviation

(N = 84)

As indicated in **Table 4.6**, respondents strongly agreed that their respective firms use digital marketing channels that help them to boost their e-marketing system (Mean = 5.655, SD = 1.217), engage their different target customers globally (Mean = 5.619, SD = 1.298). Besides, that strategy assists them to reduce the global cost of marketing campaigns of the firms (Mean = 5.559, SD = 1.467), popularise the firms' image/brand that reflects their targeted global market (Mean = 5.548, SD = 1.616), and resonate the image/brand of the firms globally (Mean = 5.536, SD = 1.501).

Besides, as indicated in **Table 4.6**, interviewee agreed that smaller born global agricultural firms in Ghana use digital marketing channels in order to popularise the firms' products or services globally (Mean = 5.441, SD = 1.608), increase global sales (Mean = 5.429, SD = 1.515), and support the firms' research and planning globally (Mean = 5.417, SD = 1.381). Additionally, digital marketing strategy encourages internationalisation (Mean = 5.298, SD = 1.574), increase brand awareness globally (Mean = 5.048, SD = 1.307), and attract international customers (Mean = 4.941, SD = 1.819). The results show that smaller-born global firms in Ghana use digital marketing channels largely to boost their e-marketing, develop an omnichannel marketing strategy that will help in their international sales.

The findings with regard to the last item under **Table 4.6**, are in line with the view of most researchers ([Hunter & Perreault, 2012](#); [Kim, 2020](#); [Lucas, 2019](#); [Rouzies et al., 2016](#)) who all aver that born global firms use digital marketing channels to boost their e-marketing, internationalization, competitiveness, and brand/image. Thus, digital marketing helps businesses reach their target audience effectively and at a low cost ([Kim, 2020](#); [Rouzies et al., 2016](#); [Wagner et al., 2020](#)). However, [Kim \(2020\)](#) indicated that some of the challenges associated with the use of digital marketing are distrust of the online payment system and non-physical verification of products. In all, consumers are more inclined towards online buying rather than visiting a retail store due to recent technological advancement ([Hunter & Perreault, 2012](#); [Kim, 2020](#); [Lucas, 2019](#); [Müller et al., 2018](#); [Wagner et al., 2020](#)).

#### 4.6 Relationships on Usage of DMCs, IEO, and ISP of SBAGFs

This section examines the relationships that exist among the usage of digital marketing channels, IEO, and ISP of smaller born global agricultural firms in Ghana. The first three hypotheses were formulated to deal with this objective. In order to test the three hypotheses, Pearson product-moment correlation was used to analyze the data. As indicated earlier, each of the variables was created by pooling the related multiple items together. The results are shown in **Table 4.7**.

**Table 4.7:** Relationship on usage of DMCs, IEO and ISP

Variables	Mean	SD	(1)	(2)	(3)	(4)	(5)
Digital marketing							
channels (1)	5.374	.334	1				
Innovativeness (2)	5.539	.551	.414**	1			
Proactiveness (3)	5.089	.786	.595**	.020	1		
Risk-taking (4)	5.351	.735	.445**	-.040	-.154	1	
International							
entrepreneurial							
orientation (5)	5.326	.376	.908**	.477**	.607**	.526**	1
International sales							
performance (6)	5.365	.426	.725**	.532**	.627**	-.208	.562**
Source: Field Data, 2021			**p<.01		(N = 84)		

The results from **Table 4.7** indicate that the deployment of digital channels has a statistically significant strong and positive relationship with the international sales performance of firms ( $r = .725$ ,  $p < .01$ ). Based on this finding, the study rejects the first hypothesis which states that there is no statistically significant positive relationship between the usage of digital marketing channels and sales performance of smaller born global agricultural firms in Ghana. This shows that the smaller born global agricultural firms use online marketing strategies such as video, email, content, social



media, and SEO marketing, the more they can achieve a significant level of sales that contribute to their goals and objectives.

Furthermore, the results from **Table 4.7** show that the usage of DMCs has a statistically vital positive relationship with IEO factors such as innovativeness ( $r = .414, p < .01$ ), proactiveness ( $r = .595, p < .01$ ), and risk-taking ( $r = .445, p < .01$ ). The relationships between the usage of digital marketing channels, and innovativeness and risk-taking were moderate while that of usage of digital marketing channels and proactiveness was strong. On the basis of this finding, the study rejects the second hypothesis which states that the usage of digital marketing channels has no statistically significant positive relationship with the components of IEO (innovativeness, proactiveness, and risk-taking) of smaller born global agricultural firms in Ghana. The findings mean that the smaller born global agricultural firms use online marketing strategies such as video, email, social media, and SEO marketing, the more they can utilize their innovation, proactiveness, and risk-taking ability to gain a competitive advantage over their rivals.

In addition, as indicated in **Table 4.7**, international entrepreneurial orientation components such as innovativeness ( $r = .532, p < .01$ ) and proactiveness ( $r = .627, p < .01$ ) have statistically significant positive and strong relationship with international sales performance of the firms. However, that of risk-taking ( $r = -.208, p > .05$ ) has no statistically significant positive relationship with the international sales performance of the firms. Even though risk-taking was not significant, the overall results show that international entrepreneurial orientation has a statistically significant positive and strong relationship with the international sales performance of the firms ( $r = .562, p < .01$ ). Based on this finding, the study, again, rejects the third hypothesis which states that international entrepreneurial orientation has a statistically significant positive relationship with the international sales performance of smaller born global agricultural firms in Ghana. The finding means that the smaller born global agricultural firms are able to utilize their innovative, proactiveness, and risk-taking ability to gain a competitive advantage over their rivals and to build good customer relationships.

The findings that emerged from **Table 4.7** support [Siegel \(2014\)](#) who averred that the introduction of technology and digitization into sales and marketing has resulted in superior returns such as enhanced productivity, and customer communication. The findings indicate that the adoption of digital marketing channels by smaller born globals can assist them to acquire information from the international market environment in order to achieve organizational objectives ([Porter & Millar, 2015](#)).

#### **4.7 Effects of Moderating factors (IEO) on DMCs and ISP of SBAFs**

After examining the associations that exist among the variables, the study further employed hierarchical multiple regression and [Hayes \(2018\)](#) moderation process analyses to test the fourth hypothesis, which states that the components of IEO are able to moderate positively the relationship between the usage of digital marketing channels and ISP of smaller born global agricultural firms in Ghana. The independent variable was the usage of digital marketing channels while the dependent variable was the ISP of the firms. However, IEO was treated as a moderator. This is comprised of three components, as indicated earlier in this paragraph.

Using the multiple regression analysis to examine the contribution of digital marketing channels deployment on the ISP of the firms, the study first checked for multicollinearity among the independent and moderating variables. This was used to examine the possible undesirable situation where the correlations among the independent and moderating variables are strong. As indicated in **Table 4.8**, all the Variance Inflation Factor (VIF) for the independent and moderating variables were less than five (5), which means there was no collinearity associated with the variables. The VIF values were also inversely related to the Tolerance values ( $VIF = 1/Tolerance$ ). According to Sarstedt and Mooi (2019), large VIF values (a usual threshold is 10.0, which corresponds to a tolerance of .10) indicate a high degree of collinearity or multicollinearity among the independent variables.

In all, it is clear that the contribution of the independent and moderating variables on the dependent variable largely was not a result of the strong association among the independent variables. Thus, the technology-to-performance chain (TPC) theory has long-established moderators as variables that positively influence digital marketing channels on the ISP of smaller-born global agricultural firms. The results of the analysis are presented in **Table 4.8**. The multiple regression analysis involved two models. In the first model, firms' usage of digital marketing channels was entered as an independent variable to test the straight-line predictor effect on the criterion variable.

As depicted in **Table 4.8**, firms' usage of digital marketing channels [ $\beta = .725 (.097)$ ,  $p < .01$ ] is able to predict the ISp of smaller born global agricultural firms significantly. Overall, the firms' usage of digital marketing channels' unique contribution to the international sales performance of the firms was .526 with an adjusted  $R^2$  of .520. This shows that smaller-born global firms' usage of digital marketing channels can contribute 52.6 percent to the international sales performance of the firms.

In the second model, as indicated in **Table 4.8**, the three components of international entrepreneurial orientation were introduced into the model. As indicated in the table, only proactiveness [ $\beta = .160 (.038)$ ,  $p < .05$ ] and risk-taking [ $\beta = .735 (.036)$ ,  $p < .01$ ] ability of the firms were able to moderate significantly. However, innovativeness [ $\beta = .037 (.041)$ ,  $p > .05$ ] failed to contribute significantly to international sales performance of the firms. Usage of digital marketing channels [ $\beta = 1.132 (.113)$ ,  $p < .01$ ] still contributed statistically significantly to international sales performance of the firms. Overall, the unique proportional contribution of both digital marketing channels and international entrepreneurial orientation to the international sales performance of smaller born global agricultural firms in Ghana was .893, with an adjusted  $R^2$  of .888. The percentage rate of incremental change when international entrepreneurial orientation was added into the first model to generate the second model was 41.1 percent.

**Table 4.8:** Moderating Role of IEO of the Usage of DMCs has on ISP of SBGAFs in Ghana

Variables	Model I					Model II					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
	B	SE	Beta ( $\beta$ )			B	SE	Beta ( $\beta$ )				
Digital marketing channels	.926	.097	.725**	9.540	.000	1.446	.113	1.132**	12.798	.000	.273	3.791
Innovativeness						.029	.041	.037	.706	.482	.491	2.038
Proactiveness						.087	.038	.160*	2.276	.026	.374	2.650
Risk-taking						.426	.036	.735**	11.784	.000	.348	2.877
Constant	.388					.158						
R	.725					.945						
R Square (R <sup>2</sup> )	.526					.893						
Adjusted R Square (R <sup>2</sup> )	.520					.888						

Source: Field Data, 2021

\*\*p&lt;.01

\*p&lt;.05

(N = 84)

Where SE = standard error

Dependent Variable: International Sales Performance

This means that usage of digital marketing channels supported by meaningful international entrepreneurial orientation, for instance, innovativeness, proactiveness, and risk-taking ability are able to influence largely 89.3 percent of the international sales performance of the firms. It, therefore, means that quite apart from these variables recognized, other issues not yet in the model have a chance of influencing about 10.7 percent of international sales performance of smaller born global agricultural firms in Ghana. The result suggests that the usage of digital marketing channels alone does not strongly influence the international sales performance of the firms and that they do so when other variables are considered.

The finding that the usage of digital marketing contributed significantly to the international sales performance of the firms corroborates with that of [Omar et al. \(2020\)](#) who found that digital marketing has a significant relationship with the performance of SME entrepreneurs. Similarly, the findings support the submission of [Suleiman et al. \(2020\)](#) and [Bhardwaj and Bordoloi \(2020\)](#). [Suleiman et al.](#) posit that digital channels can contribute to the growth of born globals because they are less expensive and a lot of customers and producers use them. [Bhardwaj and Bordoloi](#) asserted that digital marketing channels have a vital impact on the interaction between sellers and buyers.

In addition, the findings agreed with [Dunakhe and Panse \(2021\)](#) who researched how digital marketing influences the business arena for eight years time horizon. According to them, it has been concluded by many researchers that digital marketing has an impact on how customers make their final purchase decisions and the type of firms they like due to good brand image and better customer services and interactions.

The study of [Dwivedi et al. \(2021\)](#) affirmed other researchers' findings regarding the impact of social media marketing and digital platforms on firms' performance. The researchers' viewpoint provides a comprehensive narrative on business-to-business and appropriate business strategies that can contribute to business growth. Their work

supports the argument that digital marketing is gaining popularity as a result of its contribution to the sales of firms.

Further analysis was conducted to establish the direct, total, and indirect effect of usage of DMCs on ISP of SBGAFs in Ghana through IEO as moderator. The analysis is moderation using hierarchical regression which supports Hayes procedure as the most recommended for performing moderation analysis when primary data are used. A model was estimated simultaneously taking into consideration firms' usage of DMCs. A serial moderation model six (6) was conducted to find out how the effect of the predictor on the criterion is explained through the causal effect of one moderator. Statistical significance of the tested model in the current research was studied through the software developed by [Hayes \(2018\)](#). The approach is based on ordinary least-squares regression and the bootstrap method. The summary of the mediation analysis can be found in **Table 4.9**.

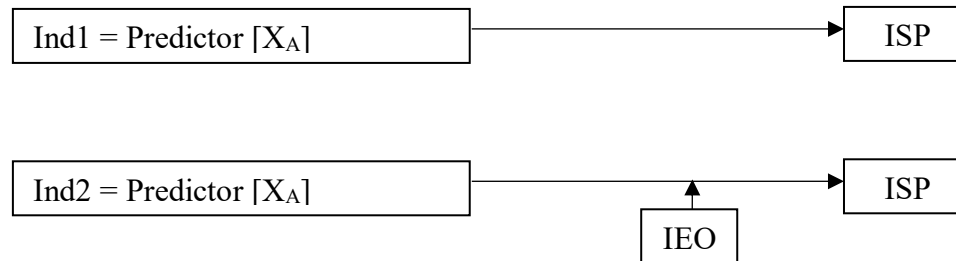
**Table 4.9:** Effects of dependable and indenpdable on IEO

Variables	Total Effect of X on Y				Direct Effect of X on Y				Indirect Effect (IEO) of X on Y				
	<i>Point</i>	<i>Boot</i>	<i>Boot</i>	<i>Boot</i>	Point	Boot	Boot	Boot	<i>Point</i>	<i>Boot</i>	<i>Boot</i>	<i>Boot</i>	
	<i>Est.</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>	Est.	SE	LLCI	ULCI	<i>No.</i>	<i>Est.</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
Digital marketing channels ( $X_{A1}$ )	.043*	.024	-.004	.091	.020	.024	-.027	.067	Ind1	.009*	.005	.002	.020
									Ind2	.009*	.005	.000	.020

X (Predictor) – Digital marketing channels [ $X_A$ ]; M1 (Moderator) – International entrepreneurial orientation (IEO); Y (Criterion) – International sales performance of the firms (ISP).

**Note:** **Ind1** represents the independent variable in the first model while **Ind2** represents the independent variable in the second model.

\*significant at .05 level



The analysis used 10,000 bootstrap samples using 95 percent confidence level. The results, as shown in **Table 4.9**, have revealed that although the effect of digital marketing channels usage on the international sales performance of firms is explained by international entrepreneurial orientation such as innovativeness, proactiveness, and risk-taking, the serial path seem to differ with specific dimensions of the predictors. For digital marketing channels usage to influence international sales performance of smaller born global agricultural firms, the relationship needs to be serially moderated by international entrepreneurial orientation,  $b = 0.009$ , *BootCI* [0.000-0.012]. The model was found to be fit based on the assertion of [Hayes \(2018\)](#) that the Mean Square Error (MSE) of the model should be closer to zero. In the case of this model, MSE obtained was .139 which shows that the model is fit.

The study, therefore, rejects the fourth hypothesis which states that IEO is not able to moderate positively the relationship between the usage of digital marketing channels and international sales performance of smaller born global agricultural firms in Ghana. The findings mean that firms' usage of digital marketing channels have a significant influential value on their international sales performance.

However, this influence can be described as being 'moderate' since the intervention of international entrepreneurial orientation will be required to strengthen it in order to increase significantly international sales performance of the firms significantly. That is when smaller born global agricultural firms believe that they can perform well and do something new, well-motivated, and also behave in a way that makes them become determined in all what it takes to be innovative, creative, and proactive, then their usage of digital marketing channels stand strongly to influence their international sales performance significantly.

The findings that emerged from **Tables 4.8 and 4.9** corroborate with that of [Adu-Darko \(2017\)](#) who posits that the most predominant form of business in Ghana is the SME sector. Although these firms are dominant in the Ghanaian economy and contribute



immensely towards the foreign reserve, promoting development projects coupled with providing high employment rates for both government and private sectors, they still face several challenges at the international level. Thus, the entrepreneurs of such need to be innovative, proactive, and take a profitable risk that could support their growth.

The finding that the usage of digital marketing channels is able to influence 52.6 percent of the firms' international sales performance is in line with that of [Nuseir and Aljumah \(2020\)](#) who investigated the function of digital marketing on business performance in the SME sector of the United Arab Emirates using quantitative method. They found digital marketing plays a significant and positive role in business performance. However, the findings that emerged in the second model of the hierarchical regression analysis are incongruent with that of [Nuseir and Aljumah](#) who found no moderating effect of environmental factors among SMEs of UAE. That is, the finding that the usage of digital marketing channels is able to influence 89.3 percent of the firms' ISP when IEO such as innovativeness, proactiveness, and risk-taking ability of the firms are considered is incongruent with that of [Nuseir and Aljumah \(2020\)](#). Their study did not observe any moderation with regard to the boosting effect of environmental factors on the relationship between digital marketing and the performance of firms.

Furthermore, the finding regarding the moderation effect supports that of [Gull et al. \(2021\)](#) who also examined the predictability of International Entrepreneurial Orientation (IEO) on the utilization of export promotion programmes (EPPs) in order to assess its association with international performance. [Gull et al. \(2021\)](#) found that the network relationships and utilization of EPPs fully mediate the effect of IEO on ISP.

#### **4.8 Effects of controls number of years in business and firm size on ISP**

As indicated in the conceptual framework, the study further looked at the effects of the controls considered. Two (2) hypotheses were formulated to be tested to appreciate

the effects firms' years in business and size have on the international sales performance of the firms. Years in business were the first to be considered. One-way ANOVA was used to analyze the data, and to explore the differences among the various groups. The years in business/operation of the firms was the independent variable and it was in four groups (Group 1: Less than 6 years; Group 2: 6 – 10 years; Group 3: 11 – 15 years; Group 4: Over 15 years). The dependent variable considered was the international sales performance of the firms, as presented in **Table 4.10**.

**Table 4.10:** Effect of Years in Business and Usage of DMCs, IEO, and ISP

Variables	Number of years in business	N	Mean	SD	F	Sig.
International sales performance	Less than 6 years	15	5.373	.563	.003	.998
	6 – 10 years	38	5.363	.425		
	11 – 15 years	21	5.367	.349		
	Over 15 years	10	5.360	.408		
	Total	84	5.365	.426		

Source: Field Data, 2021

(N = 84)

As indicated in Table 4.10, the number of years smaller born global agricultural firms in Ghana have been in operation has no statistically significant effect on their international sales performance [ $F(3, 80) = .003, p = .998$ ]. Even though there were no statistically significant differences between the groups, firms with less experience demonstrated a relatively high level of ISP. On the basis of these findings, the study failed to reject the fifth hypothesis. This finding is inconsistent with that of [Lazányi et al. \(2017\)](#) who indicated that several years in business or operation is another significant control of corporate entrepreneurship. They found that younger firms had higher odds of experiencing risk-taking which is critical to corporate entrepreneurship, compared to older firms. Also, the findings are incongruent with the assertion that younger firms may perceive their life as just beginning with more prospects ahead of them in the future. Therefore, they are poised to be more proactive at exploiting new

and international opportunities and incubating innovative ways of doing business by adopting new technologies such as digital marketing channels (Afriyie et al., 2020).

The next controlling variable considered was the effect of firm size (number of employees) on ISP. Again, the one-way between-groups ANOVA was conducted to explore the difference. Firm size was defined based on the number of employees in a firm. In Ghana, various definitions have been given for smaller born global firms, but the most commonly used criterion is the number of employees of the enterprise and capital base. According to NBSSI (2020), these firms are defined in Ghana by applying both the “fixed asset and number of employees” criteria. The number of employees’ criteria classifies them into five categories based on the number of employees. That is, micro (less than 6 employees), very small (6 – 9 employees), small (10 – 29 employees), medium (30 – 59 employees), and large (more than 59 employees). Therefore, firm size was categorized into five groups (Group 1: micro; Group 2: very small; Group 3: small; Group 4: medium; Group 5: large). The size of the firms was treated as the independent variable while the dependent variable was the study variables. The descriptive and ANOVA results are presented in **Table 4.11**.

**Table 4.11:** Effect of Firms’ Size on Usage of DMCs, IEO, and ISP

Variables	Firm size	N	Mean	SD	F	Sig.
International sales performance	Less than 6 (Micro)	5	5.580	.465	1.130	.349
	6 - 9 (Very small)	16	5.244	.403		
	10 - 29 (Small)	36	5.350	.440		
	30 - 59 (Medium)	21	5.471	.402		
	Above 59 (Large)	6	5.233	.432		
	Total	84	5.365	.426		

Source: Field Data, 2021

(N = 84)

Results from Table 4.11 show that there were no statistically significant differences at the  $p < .05$  level in the views of the respondents with regards to their international

sales performance [ $F(3, 80) = 1.130, p = .349$ ]. However, the results further show that micro and medium firms are able to demonstrate a relatively high level of international sales performance as compared to very small, small, and large firms. Based on these findings, the study failed to reject the sixth hypothesis.

This means the size of a smaller-born global agricultural firm in Ghana does not influence its international sales performance. The findings are not in line with the assertions of [Lazányi et al. \(2017\)](#) and [Afriyie et al. \(2020\)](#) who both conducted their studies in different socio-cultural contexts found that consistently, large and medium firms have demonstrated or reported higher international sales performance compared to smaller and micro firms.

The study employed linear regression analysis to present both the independent, moderating, and control variables based on the theoretical argument of the study to analyze further the effects of the control variables on the study variables. The results are presented in **Table 4.12** in the subsequent section.

As depicted in the **table 4.12**, firms' number of years in business/operation [ $\beta = .042 (.018), p > .05$ ] and size [ $\beta = .021 (.017), p > .05$ ] are not able to contribute significantly to international sales performance of the firms. This confirms the earlier findings that years of experience and size of smaller born global agricultural firms have no effect on their usage of digital marketing channels, international entrepreneurial orientation, and international sales performance.

**Table 4.12:** Regression Results of the Study Variables

Variables	Model I				Model II				Model III			
	UnStd. Coef.		Std. Coef.	Sig.	UnStd. Coef.		Std. Coef.	Sig.	UnStd. Coef.		Std. Coef.	Sig.
	B	SE	Beta ( $\beta$ )		B	SE	Beta ( $\beta$ )		B	SE	Beta ( $\beta$ )	
Digital marketing channels	.926	.097	.725**	.000	1.446	.113	1.132**	.000	1.445	.118	1.132**	.000
Innovativeness					.029	.041	.037	.482	.029	.042	.037	.492
Proactiveness					.087	.038	.160*	.026	.087	.039	.160*	.030
Risk-taking					.426	.036	.735**	.000	.426	.038	.734**	.000
Number of years in business									.020	.018	.042	.277
Firm size									.009	.017	.021	.578
Constant	.388				.158				.155			
R	.725				.945				.946			
R Square (R <sup>2</sup> )	.526				.893				.895			
Adjusted R Square (R <sup>2</sup> )	.520				.888				.884			

Source: Field Data, 2021

\*\*p&lt;.01 \*p&lt;.05

(N = 84)

Where SE = standard error, Std. = standardized, UnStd. = Unstandardized, and Coef. = Coefficients

Dependent Variable: International Sales Performance

## 5 Conclusions

The last section provides conclusions, recommendations, and suggestions for further research considering the discoveries unfold from the study. In Ghana, Small and medium-sized enterprises are the main companies of the nation, particularly smaller-born global agricultural firms. They are responsible for the majority of employment generation in the private sector of the country. However, their full benefits are underdeveloped in Ghana largely because of challenges these firms encountered over the years regarding their poor international sales. Through effective usage of digital channels, smaller-born global agricultural firms in Ghana are able to record some level of international sales performance. However, the influence is not strong. It becomes strong through the moderating effect of the IEO of the firms.

Thus, when smaller born global agricultural firms in Ghana use digital channels for instance email, SEO, and video marketing, they are likely to record some level of degree to which they carry out activities to build relationships with prospective international customers as well as existing customers and owners of the firms. However, this impact may be higher if the firms utilize their innovativeness, proactiveness, and risk-taking ability to gain a competitive advantage over their rivals in the international market. It is, therefore, necessary for the firms to strengthen their respective international entrepreneurial orientation such as innovativeness, proactiveness, and risk-taking ability because such intervention will make them increase the level of their international sales performance as a whole and contribute to their future growth.

### 5.1 Contribution to Theory, Policy, and Practice

Firstly, this thesis adds to the TPC theory by confirming their assumption and expanding the argument of theory (Ahituv & Giladi, 2004). The study shows that the adoption of digitization, concerning digital marketing channels usage, helps in boosting

international sales performance of smaller born global agricultural firms in Ghana. However, the study added that with appropriate international entrepreneurial orientation, the firms will be able to exhibit a greater degree of proactiveness, innovativeness, and risk-taking ability, a phenomenon that will help in increasing their international sales performance significantly.

Theoretically, the finding of the moderation effect on association regarding usage of digital marketing channels and ISP suggests that the firms can enhance their international sales performance utilizing international entrepreneurial orientation practice relating to being innovative, proactive, and taking profitable risk ventures. The study further contributes to new knowledge by conceptualizing variables previously studied differently such as digital marketing channels, international entrepreneurial orientation, and international sales performance (Venkatesh & Davis, 2010).

Based on previously existing research and findings of the current study an integrated model of digital marketing channels usage and international sales performance of smaller born global firms was developed to understand the issues better. The model incorporates the study variables in the Ghanaian cultural context. The development of such a model has added to knowledge on the usage of digital marketing channels within smaller born globals, particularly in Ghana. The study also makes a practical contribution to the owners/managers of SMEs who are seen as agents to promote or otherwise a corporate entrepreneurship culture within their firms. The world is not linear, particularly in the world of business just like this study which establishes that no matter how strong the usage of digital marketing channels by a firm is, interventions must be put in place to improve the proactiveness, innovativeness, and risk-taking ability of the firm. This is so because proactive and innovative companies that are able to take profitable risky investments are in a much better position to use digital marketing channels to reach foreign markets effectively and at a low cost.

In context to the contribution of the study, knowledge on usage of digital marketing channels and international sales performance of smaller born globals can serve as a guide for NGSSI, and other bodies in the business world to enact clear cut policy in the form of periodic training, for smaller born globals on how to develop and or improve their digitization drive, international sales and IEO. Additionally, the Ministry of Trade and Industry can design, develop and implement corporate governance practices for smaller born globals that will take into consideration the non-functional role of digital marketing channels in order to help boost their international sales.

The findings of the study have corporate entrepreneurship implications. While a start of a firm has the promise of all things bright, no firm is without its gloomy patches. Every firm needs a little help from time to time, both human and non-human resources. However, the engine of all firms is its employees. Therefore, to ensure the survival and expansion of firms, there is the need to develop and nurture international corporate entrepreneurial orientation both at the firm and individual level by enhancing their proactiveness, innovativeness, and risk-taking ability. This means the firms must enhance their competitive intensity, technology changes, and market dynamics. Similarly, the firms must improve their international entrepreneurial orientation and digitization policies to meet the current needs.

## **5.2 Recommendations**

Taking into consideration the main discoveries and inferences of the study, several practical recommendations are made to understand digital marketing channel usage leading to a high level of firms' international sales performance in Ghana and beyond:

1. Entrepreneurs of the firms may encourage the training of the workers on the usage of digital marketing channels in marketing. They should ensure that all salespersons are motivated equitably and must participate in the essential workshops to explore



every available opportunity to develop their international marketing skills. This intervention will help the employees to apply digitization in marketing effectively and efficiently.

2. Owners/managers of the firm should ensure that their marketing strategies and digitization drive for sales suit different selling situations in order to increase their international sales performance.
3. In line with the finding that IEO is able to moderate the positive influence of digital marketing channels usage on international sales, performance shows that NBSSI can organize a series of workshops on the usage of digitization in international business to help enhance the marketing strategies of the firms. Again, this intervention will help encourage employees to believe that innovation and proactiveness are skills needed to survive in the international market. Similarly, the owners/managers of the various firms should ensure that they champion innovative ideas, recognize people who articulate good ideas and provide the necessary resources to all employees to help boost international entrepreneurial actions of the employees and that of the firm as a whole.
4. Entrepreneurs of the firm should make sure that their firms strengthen their digitization and internationalization drive by first boosting their innovativeness, proactiveness, and risk-taking ability. In the future, it may contribute to increasing organizational growth. They should also upgrade their digital marketing technology infrastructure whenever it is appropriate to meet current international trends and the requirements of their international customers.

### **5.3 Recommendations for future studies**

Based on the outcome of the study it is recommended that the preceding areas should further be investigated to improve upon the knowledge of the thesis. First, it is recommended for the future relative assessment of the factors that improve the international sales performance of born global firms in Ghana, apart from the usage of

digital marketing channels. Variations occur with regard to the usage of digital marketing channels, IEO, and ISP of smaller born global agricultural firms in Ghana, as a result, these variables might change to some degree as the sector is usually dynamic. Longitudinal studies may be conducted at several time points for 3 – 5 years to help comprehend the dynamics of digital channels and international sales performance better. Also, the study instrument may be used in the study of other firms, other than smaller born global agricultural firms, in the country in order to assess their suitability and logic in other areas, and to broaden the understanding of digital marketing channels and international sales performance within the international business sector.

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## Appendix

### Questionnaire for Respondents

Dear Sir/Madam,

*This questionnaire is aimed at collecting data that will enable the researcher to examine the above problem statement. The owners/managers of smaller born global agricultural firms that use digital marketing channels to engage with and on board customers have been selected as a unit of analysis. The survey is completely voluntary and your opinions will be kept confidential. Should you have any questions concerning this survey, please feel free to contact the researcher (Phone No.: +491633806177/+233557180069).*

#### SECTION A: Background Characteristics

1. Please indicate the name of your firm/enterprise and when it was founded.
  - a) Name of firm/enterprise: .....
  - b) Year of foundation: .....
2. Gender of respondent:      (a) Male [  ]                      (b) Female [  ]
3. Age of respondent:      (a) 18 – 26 years [  ]    (b) 26 – 35 years [  ]  
    (c) 36 – 45 years [  ]    (d) 46 – 55 years [  ]    (e) 56 years and above [  ]
4. Highest educational level of respondent:
  - (a) No formal education [  ]      (b) Basic [  ]      (c) Secondary [  ]      (d) Tertiary [  ]
5. Please indicate the sector your firm/enterprise is operating.    (a) Agricultural sector [  ]    (b) Service sector [  ]    (c) Industrial sector [  ] (d) Others .....
6. What is the current number of permanent employees in the enterprise? .....
7. What is the current size of the firm/enterprise? .....
8. Estimate yearly expenditure (in US dollar) of the business .....
9. What is the business estimated yearly sales value (in in US dollar)? .....

**SECTION B: Degree of Internationalisation**

1. Indicate the number of years the firm has been in business after establishment or from foundation of the firm. ....
2. Indicate the firm's/enterprise's number of years since first exporting/being involved in international activity (international experience). ....
3. Indicate the current percentage (%) of the firm's targeted sales that are going outside the country (ie, foreign sales).  
(a) 0 – 20 [ ] (b) 21 – 40 [ ] (c) 41 – 60 [ ] (d) 61 – 80 [ ] (e) 81 – 100 [ ]
4. Indicate the current percentage (%) of the firm's achieved global or foreign sales.  
(a) Less than 25% [ ] (b) 25% - 49% [ ] (c) 50% – 74% [ ] (d) Above 74% [ ]
5. If the current percentage (%) of the firm's achieved global or foreign sales is 25% or above, please indicate when (year) the firm achieved such sales. ....
6. Please indicate proportionally, in percentage terms, the total sales of the firm for last year among the various geographical areas. **Note: It should sum up to 100%**

Local (Ghana) .....	%	Europe .....	%
Africa (excluding Ghana) .....	%	Middle-East .....	%
Antarctica .....	%	North America .....	%
Asia .....	%	South America .....	%
Australia .....	%		
7. Please list three (3) currently most important international countries the firm's achieved global or foreign sales are associated with.
  - a) .....
  - b) .....
  - c) .....
8. Indicate the type of product(s) that your firm/enterprise produces/export/sells?  
.....  
.....



For the rest of the sections (C, D, E and F), indicate your level of agreement with the indicated statements. Note that, responses will be measured numerically such that as a response gets closer to one (1), the respondent strongly disagrees with the statement; however, when a response gets closer to seven (7), the respondent strongest agrees to the statements. Specifically, the responses will be classified as 1 = totally disagree, 2 = strongly disagree, 3 = disagree, 4 = neutral, 5 = agree, 6 = strongly agree, and 7 = totally agree.

### SECTION C: Digital Marketing Channels

Statements on digital marketing channels	1	2	3	4	5	6	7
1. My firm often display its products and services online.	1	2	3	4	5	6	7
2. Our foreign customers prefer buying/shopping on our online sites as compare to the conventional channels.	1	2	3	4	5	6	7
3. My firm's affiliate network attracts much traffic.	1	2	3	4	5	6	7
4. Our affiliate network offers quality customer supports.	1	2	3	4	5	6	7
5. Our email marketing strategy delivers highly relevant content to subscribers' inbox in a non-invasive way.	1	2	3	4	5	6	7
6. Through an email newsletter, my firm is able to engage its foreign customers or potential customers of upcoming events and new product offerings.	1	2	3	4	5	6	7
7. My firm is able to use social media platforms to amplify brand awareness.	1	2	3	4	5	6	7
8. Usage of social media has made my firm to be more accessible to our foreign customers.	1	2	3	4	5	6	7
9. My firm is able to use search engine optimisation (SEO) to streamline our international campaigns.	1	2	3	4	5	6	7
10. We are able to optimise results through the use of our SEO.	1	2	3	4	5	6	7
11. We are able to build global brand awareness using our video marketing strategy.	1	2	3	4	5	6	7
12. My firm edges out its competitors' videos in order to improve our international advertising techniques.	1	2	3	4	5	6	7
13. My firm's global content marketing strategy focuses on our consumers' needs first before that of the firm.	1	2	3	4	5	6	7
14. My firm's content marketing is informative and valuable to our target global audience.	1	2	3	4	5	6	7
15. My firm relies on its global customers' recommendations of their brand to inspire other customers to make purchases.	1	2	3	4	5	6	7

**SECTION D: Reasons for using digital marketing channel(s)**

Indicate your level of agreement regarding the major contextual or circumstantial reasons that influenced your firm/enterprise to select and use digital marketing channel(s).

<b>Contextual or circumstantial factors/reasons</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1. For business growth through increase in global sales.	1	2	3	4	5	6	7
2. For market automation or digitalisation.	1	2	3	4	5	6	7
3. For purposes of market globalisation or internationalisation.	1	2	3	4	5	6	7
4. To attract international customers.	1	2	3	4	5	6	7
5. To popularise the firm's products or services globally.	1	2	3	4	5	6	7
6. To popularise the firm's image/brand that reflect our targeted global market.	1	2	3	4	5	6	7
7. To resonate the image/brand of the firm globally.	1	2	3	4	5	6	7
8. To reduce the global cost of marketing campaigns of the firm.	1	2	3	4	5	6	7
9. The firm's high level of capacity in digital marketing.	1	2	3	4	5	6	7
10. To increase our brand awareness globally.	1	2	3	4	5	6	7
11. To support the firm's research and planning globally.	1	2	3	4	5	6	7
12. To develop an omnichannel marketing strategy to engage our different target customer personas globally.	1	2	3	4	5	6	7
13. To boost the firm's e-marketing system.	1	2	3	4	5	6	7
14. Others (please specify) .....							
.....							

**SECTION E: International Entrepreneurial Orientation**

<b>Statements on innovativeness</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1. My firm continually develops new products lines to boost global sales.	1	2	3	4	5	6	7
2. The products and services of my firm are perceived to be novel by global customers.	1	2	3	4	5	6	7
3. In this firm, we constantly develop in-house solutions to improve our production processes.	1	2	3	4	5	6	7
4. In this firm, we think and behave in original and novel ways rather than imitating to be internationally competitive.	1	2	3	4	5	6	7
<b>Statements on proactiveness</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1. My firm usually acts in anticipation of future problems,							

needs or changes.	1	2	3	4	5	6	7
2. In this firm/enterprise, we prefer to “step-up” and get things going on rather than sit and wait for other firms to do it.	1	2	3	4	5	6	7
3. My firm is actively engage in the global business environment, not passively observing.	1	2	3	4	5	6	7
4. My firm constantly foreseeing potential global environment changes and future demands ahead of its competitors.	1	2	3	4	5	6	7
<b>Statements on risk-taking</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1. My firm does not use borrowing to finance the global activities of the firm.	1	2	3	4	5	6	7
2. My firm encourages lesser level financial and personal risk-taking.	1	2	3	4	5	6	7
3. My firm ensures that global risk factors are assessed to minimise uncertainty.	1	2	3	4	5	6	7
4. In this firm, individual risk takers are often recognised for their willingness to champion new projects, even if not eventually successful.	1	2	3	4	5	6	7

#### **SECTION F: International Sales Performance of Smaller Born Global Firms**

<b>Statements on International sales performance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1. Usage of digital marketing channels has helped in growing our international customer base.	1	2	3	4	5	6	7
2. Usage of digital marketing channels has helped to increase our international sales.	1	2	3	4	5	6	7
3. The usage of digital marketing channels has empowered us to get in touch and stay in touch with our global customers.	1	2	3	4	5	6	7
4. Usage of digital marketing channels has helped in building effective relationships with our global customers.	1	2	3	4	5	6	7
5. Usage of digital marketing channels has helped in making effective foreign sales presentations.	1	2	3	4	5	6	7
6. Through the various online platforms, my firm is able to meet the needs of global customers promptly.	1	2	3	4	5	6	7
7. Usage of digital marketing channels has helped in achieving my firm’s annual global sales target.	1	2	3	4	5	6	7
8. Our international customers are highly satisfied with our digital marketing channels.	1	2	3	4	5	6	7
9. Usage of digital marketing channels has increase the loyalty level of our existing global customers.	1	2	3	4	5	6	7

10. Usage of digital marketing channels has enhanced our global image.	1	2	3	4	5	6	7
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***Thank you for your time and worthy contributions to this project!***