



Vaasan yliopisto
UNIVERSITY OF VAASA

OSUVA Open
Science

This is a self-archived – parallel published version of this article in the publication archive of the University of Vaasa. It might differ from the original.

A typology of born global firms' attributes and future directions

Author(s): Khan, Huda; Cavusgil, S. Tamer

Title: A typology of born global firms' attributes and future directions

Year: 2025

Version: Accepted manuscript

Copyright © Emerald Publishing Limited. This AAM is provided for your own personal use only. It may not be used for resale, reprinting, systematic distribution, emailing, or for any other commercial purpose without the permission of the publisher.

Please cite the original version:

Khan, H. & Cavusgil, S.T., (2025). A typology of born global firms' attributes and future directions. *Multinational business review*, 33(1), 1 -18. <https://doi.org/10.1108/MBR-03-2024-0034>

A typology of born global firms' attributes and future directions

ABSTRACT

Purpose: The phenomenon for born global firms (BGFs) has become mainstream, that is observed across many industries and countries. This study distills extant literature regarding BGFs to uncover critical attributes shared by BGFs. It applies a frame-based approach, a relatively under-applied methodology in the international business (IB) literature, to develop a multi-dimensional typology of BGFs' attributes.

Methods: A frame-based methodology was used to uncover and classify the dimensions of BGFs' attributes that emanate from the literature.

Findings: With BGFs as the superordinate phenomenon or concept, a typology of five subordinate dimensions emerged, namely i) defining characteristics; ii) orientations; iii) capabilities; iv) resources; v) strategies/actions.

Value: This paper offers three important contributions. First, it provides a clear delineation of attributes associated with BGFs in order to provide a holistic perspective of the born global phenomenon. Second, it demonstrates a relatively under-applied frame-based methodology to analyze the BGFs' attributes and presents conceptual clarity based on the literature review. Third, this paper identifies critical areas and recommends important guidelines for future scholarly developments in the born global literature

Keywords: *born global; typology; entrepreneurial firms; frame-based methodology; future research agenda.*

A typology of born global firms' attributes and future directions

1. INTRODUCTION

Amid globalization, the born global firms (hereafter BGFs) phenomenon emerged in 1980s in the wake of early and rapid internationalization (McDougall et al., 1994; Oviatt & McDougall, 2005a; Rennie, 1993). This business model has evolved and become entrenched over time across many countries and industries, consequently making BGFs a mainstream phenomenon in international business (IB) practice. Accordingly, the BGF phenomenon has received extensive scholarly attention. In defining the properties of BGFs, Knight et al. (2004) suggest that BGFs are typically young entrepreneurial firms that internationalize at the early age of inception, generally within three years, often through exporting which accounts for at least 25% of their revenue.

Despite the importance of understanding those concepts or properties of BGFs that have facilitated the international success of these firms, the literature regarding the properties or attributes of BGFs has remained fragmented. Indeed, BGF attributes may even be subjected to diverse interpretations or ambiguity (Chetty & Campbell-Hunt, 2004). Given the divergent observations regarding the BGF attributes, this issue has become notable and important to be addressed. For example, some studies considered entrepreneurial orientation as the most important and defining attribute of BGFs (Bylund & McCaffrey, 2017; Kuivalainen et al., 2007). Others contended that learning orientation (Jantunen et al., 2008) and managerial commitment (Gabrielsson et al., 2008) are the most important attributes. This means that BGF studies that involve selected contextual attributes at an elemental level may not provide a complete picture, thereby possible resulting to misleading conclusions regarding the most important attributes that drive BGFs' success.

Similarly, to be classified as born global, a firm's internationalization debut ranges from within two to five years from inception (Braunerhjelm & Halldin, 2019), generally three years (Knight & Khan, 2024). There is also no clear consistency in the literature on the proportion of sales from exporting. Some argue it to be at least 10% of revenue from within five years (Braunerhjelm & Halldin, 2019), while others define it to be at least 25% within three years (Knight & Cavusgil, 1996). Accordingly, it is argued that BGFs scholarships needs to unify and improve heterogeneous conceptualization and definitions (Knight & Cavusgil, 2024).

The present study takes into account the seminal papers and views on BGFs (Cavusgil & Knight, 2015; Knight & Cavusgil, 2024; Knight & Cavusgil, 2004; Knight & Cavusgil, 2005a; Knight & Liesch, 2016; Weerawardena et al., 2007) along with review of born global literature to provide a consolidated perspective of BGFs attributes critical to the firms' success. In doing so, we adopted a frame-based methodological approach to consolidate BGF attributes and present a multi-dimensional typology of the attributes which have become mainstream in born global literature. The frame-based methodology brings conceptual clarity to a construct that possesses a number of attributes or defining features (Deligonul, 2023). It develops and presents the combination of attributes in a form of typology that defines the domains of the attributes for specificity.

Considering an example of family members to illustrate the frame-based methodology, Frydrych (2017) explained that some members have attributes (e.g., eye color) common to the entire family. However, there can also be some features that are not shared by all (e.g., hair color). Similarly, Chen (2002) provided an example of a bird, whereby certain attributes of a bird (e.g., round beak vs pointed beak) can make it a water bird or a land bird respectively. These examples set the underlying foundation of the frame-based approach in identifying the attributes of a concept (e.g., beak), the value of the attribute (e.g., round vs pointed), depending on which one can classify the attributes clearly into its defining domain.

Consistently, a recent work by Khan et al. (2024) adopts the frame methodology for providing conceptual clarity to the concept of organizational resilience based on its defining attributes.

Using the frame-based approach, the present study shows that BGFs attributes can be grouped into five major dimensions deriving from major studies (Cavusgil & Knight, 2015; Knight & Cavusgil, 2005b). The first dimension is the **defining characteristics** that denote the firms' nature e.g., young entrepreneurial firms that generate at least 25% of the sales revenue from internationalization activities within three years of inception. Second, the **orientations** dimension accounts for the firms' directions, vision, or motivations e.g., entrepreneurial, learning and market orientations etc. Third, **capabilities**, such as networking and flexibility (adaptability), make up the third dimension. Fourth, the dimension of **strategies/actions** denotes purposeful strategic actions e.g., marketing, foreign distribution, and niche strategy. Finally, the fifth-dimension concerns **resources**, such as prior experience and human capital, that have enabled BGF success in internationalization.

This study offers three contributions to the born global research stream. First, by clearly delineating attributes associated with BGFs, the study presents a holistic perspective of the born global phenomenon. Second, according to Bergh et al. (2022), although numerous studies have advanced disciplinary knowledge based on theoretical advancement, there are limited writings that adopted nascent methodological approaches in refining conceptual clarity. In this regard, using the frame-based approach for developing a typology of BGFs' attributes offers a contribution by presenting a consolidated view on its attributes across major dimensions. In turn, this allows better representation, knowledge organization, and understanding this concept. Third, the typology building enables identifying what has been examined under each dimension. Accordingly, one can point to the under-examined avenues for future scholarly contributions to the literature.

2. WHY FRAMING OF BORN GLOBAL ATTRIBUTES IS IMPORTANT

2.1. Evolution of Born Global Phenomenon

The born global phenomenon stems from the early work on international new venture, defined as an enterprise that seeks competitive advantage from sales in international markets (Oviatt & McDougall, 2005b). As countries embrace entrepreneurial activities to accelerate economy, new ventures increasingly adopt internationalization as a mean for growth, hence it becomes imperative to understand the dynamics of the born global phenomenon. While Cavusgil and Knight (2015) have presented extensive areas for future scholarly work in this domain, however, their directions are not fully exhaustive (Zander et al., 2015). According to Buckley (2002), the born global phenomenon is likely to remain a major prevailing phenomenon for an extensive period over time, and this is clearly evident from the observation on how this field has evolved and still attracting extensive scholarly attention in the IB discipline (Braunerhjelm & Halldin, 2019; Coviello, 2015; Hennart et al., 2021; Loufrani-Fedida et al., 2019; McCormick & Somaya, 2020; Prieto-Sánchez & Merino, 2022).

An exhaustive body of research has examined how and why BGFs develop unique characteristics including global network, capabilities, strategic choices and orientations etc. to guide their internationalization strategies (Zander et al., 2015). The studies into BGFs suggest that nature, orientation, capabilities, resources, and strategic moves are the salient domains in BGFs research (Cavusgil & Knight, 2015; Knight & Cavusgil, 2005b). However, it is yet unclear what are the most defining features or attributes of BGFs within these domains. Accordingly, based on a review of literature, this study develops a typology of their consistently defining attributes under five major domains. The subsections cover their largely examined attributes that fall under the five domains.

2.1.1. Defining characteristics

Born global firms are defined as young, small and medium entrepreneurial ventures that internationalize rapidly in the early age of their inception, typically within three years (Cavusgil & Knight, 2015; Knight & Cavusgil, 2004). There are different cut-off points noted for the internationalization timeframe in the literature e.g., two years (Moen & Servais, 2002), four years Kuivalainen et al. (2012) or up to five years from inception (Braunerhjelm & Halldin, 2019). BGFs rapidly develop global reach, with exporting as the primary market entry mode, and this is a consistently defining view of the born global internationalization phenomenon (Chetty & Campbell-Hunt, 2004). They generate more than 25% of their sales from exporting (Knight et al., 2004; Knight & Cavusgil, 1996). However, some argue that they internationalise mostly on a regional basis (Cavusgil & Knight, 2015; Lopez et al., 2009). BGFs at first-stage internationalization consider physically close markets before moving to the distant markets (Hashai & Almor, 2004). Kuivalainen et al. (2007) argues that apparently BGFs export to close markets with export ratio close the 25% cut-off, while true BGFs operate in distant and multiple regions with a high turnover. However, there are also arguments that they simultaneously enter close and distance markets to balance their short and long term goals (Trudgen & Freeman, 2014).

2.1.2. Orientations

The literature further asserts that firms' strategic orientations contribute to the evolution of the born global phenomenon (Covin & Miller, 2014; Freixanet & Federo, 2022). Taking this orientation perspectives into account, numerous studies have examined firms' entrepreneurial orientation and entrepreneurial commitment (Freeman & Cavusgil, 2007; Knight & Cavusgil, 2005b). For example, BGFs' international entrepreneurial orientation is consistently asserted to be a critically important attribute or characteristic in a number of studies (Falahat et al., 2018; Knight & Cavusgil, 2004; Weerawardena et al., 2007). This includes their global vision and perseverance; and innovativeness and proactiveness that enhances their operational performance (Gerschewski et al., 2015). BGFs are consistently seen as entrepreneurial oriented ventures that are willing to take risks and inclined towards innovation and new market opportunities. Such an orientation influences both their marketing strategy and performance (Falahat et al., 2018). Their proactiveness, risk taking and innovativeness are thus critical in understanding their capability development for enhanced performance (Zhou et al., 2010).

Further, BGFs' entrepreneurial proclivity as a strategic orientation, explained as a "*firm's disposition to engage in entrepreneurial process, characterized by risk taking, innovativeness and proactiveness*" is an important characteristic for acquiring foreign market knowledge for rapid internationalization (Zhou, 2007, p. 283). International commitment of entrepreneurs matters for their degree of global-ness (Cannone & Ughetto, 2014) and different states of commitments in accelerated internationalization (Freeman & Cavusgil, 2007).

Their entrepreneurial, learning, and international growth orientation are widely examined for their enhanced international performance (Jantunen et al., 2008), and competitor orientation for their perceived success (Gerschewski et al., 2015). Global orientation (Cerrato & Piva, 2015), entrepreneurial and technological leadership orientations (Knight & Cavusgil, 2005a), and growth orientation along with learning and entrepreneurial orientations, have also been consistently pointed out as critical attributes or defining features (Jantunen et al., 2008). In examining the different internationalization patterns, growth orientations are found to be important in born global and born regional patterns, whereby learning orientation fosters traditional internationalization (Baum et al., 2015). Marketing and entrepreneurial

orientations are efficacious for their unique product development and quality focus strategies. However, global technological competence as a strategy is a function of entrepreneurial orientation, while foreign distributor strategy is related to marketing orientation for their international market performance (Knight & Cavusgil, 2004). Consistently, market and entrepreneurial orientations are influential for BGFs' absorptive capacity development for enhanced innovation performance (Rodríguez-Serrano & Martín-Armario, 2019).

2.1.3. Capabilities

The capabilities of BGFs have remained a prominent domain of scholarly interest (Freeman et al., 2006; Freixanet & Federo, 2022; Gabrielsson & Kirpalani, 2004). Cavusgil and Knight (2015) stress that unique capabilities are critical for product innovations, upgrades, and even survival. In this view, market-focused learning and internally-focused learning capabilities, and networking capabilities are conceptualized as important attributes that require orientations such as learning, entrepreneurial and geocentric mindset (Weerawardena et al., 2007). Marketing capabilities are pointed out as an important characteristic for their positional advantage and competitive strategies (Martin et al., 2017). Consistently, networking capabilities are also emphasised for their important roles in marketing strategies (Falihat et al., 2018).

Efrat and Shoham (2012) examine the effects of BGFs' capabilities on survival and strategic performance. Specifically, technological/R&D capability, management capability (comprising integrated logistics systems, cost control, financial management, HR, profitability and revenue forecasting, and marketing planning), and marketing capabilities (focused on active measurement of marketing effectiveness), are all important for survival. Further, marketing capabilities focused on developing knowledge-based capability is critical for strategic performance (ibid). Use of technology (as a competence) in client interactions is found to be important for exporting (McCormick & Somaya, 2020). Absorptive capacity also helps BGFs in early internationalization through entrepreneurial and market-orientations, which allows them to enhance their innovation performance (Rodríguez-Serrano & Martín-Armario, 2019). Firm flexibility as an adaptive capability facilitates their degree of globalness (Cannone & Ughetto, 2014).

2.1.4 Strategies/Actions

In the stream of research concerning strategies and actions, scholars have found that BGFs' product and service quality focus are critical strategies for their financial, operational and perceived success, and niche strategy is important for their financial performance (Gerschewski et al., 2015). Consistently, niche strategy is asserted as their dominant strategy for product-market scope in internationalization (Cannone & Ughetto, 2014; Chetty & Campbell-Hunt, 2004).

Marketing strategies also drive BGs' internationalization phenomenon (Falihat et al., 2018; Luostarinen & Gabrielsson, 2006), and competitive strategies are found to be important specifically for their positional advantage (Martin et al., 2017). It is also argued that smaller BGFs specifically make use of two strategies, the use of advanced technologies and relational strategies, to overcome lack of economies of scale and resources, and aversion to risk taking in rapid internationalization (Freeman et al., 2006).

Knight and Cavusgil (2004) contend that BGSs' performance in the international markets is attributed to four business strategies, global technology, unique products development, quality focus, and leveraging foreign distributors. Product differentiation strategy is associated with BGFs that have a regional focus, and not with the BGFs that have a traditional internalization pattern or BGFs that have global and traditional internationalization patterns (Baum et al., 2015).

According to Kuivalainen et al. (2007), BGFs are also classified based on their degree of scaling and scoping in internationalization strategy along with the timing, such that true BGFs have high degree of scaling and scoping in internationalization (that takes into account both the country distance and export turnover measures) and time lag between their inception and internationalization is three years or less. However, the geographic diversification (scoping) strategies that are intra-regional and inter-regional (i.e., within a region and across different regions) can cause differential effects on their risk of failures under home industry dynamism, such that intra-regional lowers and inter-regional increases their risks of failures under industry dynamism (Patel et al., 2018). There is still a scope for examining these disparate findings on geographical diversification strategies for BGFs.

2.1.5 Resources

BGFs often face challenges in terms of access to resources (Freixanet & Federo, 2022). This presents a challenging situation given the demand for resources involved in early and rapid internationalization. Effective deployment of limited and unique resources facilitate their internationalization (Cavusgil & Knight, 2015). Given firms in a certain industry and country are heterogenous in their resource endowments and the resources may not be mobile (Barney, 1991), it is naturally imperative for BGFs to possess a pool of critical resources for achieving competitive advantage in a targeted international market. In this respect, knowledge based resources are emphasized as critical for their early and rapid internationalization (Gassmann & Keupp, 2007). Consistently, it argued that BGFs should possess international market knowledge before their first move towards internationalization (Sharma & Blomstermo, 2003). Their social capital is one of the most dominant resources for knowledge acquisition for product innovativeness (Presutti et al., 2020).

Comparing BGFs with established firms, human capital (specifically cross-national entrepreneurs, as a resource) is important for engagement in exporting, and weak positive effects are found for top management with international experience and exporting (McCormick & Somaya, 2020). The founders' international experience and network of partners are critical resources-based attributes of BGFs (Chetty & Campbell-Hunt, 2004). Consistently, prior experience is found to be important for both the born global and born regional approaches in internationalization (Baum et al., 2015). Likewise, network relationship established by entrepreneurs is imperative to their early internationalization and scope of expansion (Cannone & Ughetto, 2014). The characteristics of entrepreneurial/management teams and partnerships/networks serve as their important resources, irrespective of the industry that differentiates born global with born to run firms. In this regard, founders with international experience, education, and global mind set implying their entrepreneurial posture, are found to be evident in their unique business ideas and enactment of global niche markets (Hagen & Zucchella, 2014).

2.2. Key Gaps and Contribution to the Literature

As the above review shows, an impressive number of studies have widely contributed value added work on BGFs. Emanating from literature, this present study collects and presents an inventory of clearly and consistently defining attributes important to the success of BGFs. This helps in developing recommendations for moving this field forward. The above review of attributes on BGFs also reveals that some of the attributes in present literature has no clear and conclusive finding. Further, there is lack of clarity on the most dominant attributes of BGFs that contribute to their success. Based on our knowledge, there is limited work on developing a comprehensive typology of attributes of BGFs and classifications of attributes into its major domains. This is critical given that such a typology would offer a scientific approach to knowledge organization and representation of the BGFs

concept, and retrieval of knowledge developed on BGFs. Through a clear representation of BGFs' attributes and their classification across different domain, the present study provides a clear delineation of dominant attributes examined under each dimension. This facilitates the understanding of the nature, workings, and relationships of the born global concept, and helps future researchers to gain knowledge on mechanisms behind this phenomenon, obtain conceptual clarity, and therefore reduce potential measurement bias. The next section explains the frame-based methodology in enabling the development of this typology and its unique advantages and importance.

3. FRAME-BASED METHODOLOGY

3.1. Explaining the frame-based method

The interrelationships of concepts can be represented by frames, that are multivalued attributes integrated by structural connections (Barsalou, 2012; Deligonul, 2022). The purpose of framing approach to classify and organize traits or attributes so that entities (such as organizations) can be viewed through shared commonalities and differences among the features. The frame-based approach is a technique for conceptualizing a construct that involves multiple observed and latent variables (Deligonul, 2023). The method helps to bring clarity to a concept, and allows reflecting upon the causal mechanisms within the framework (Byrne, 2013). Through this approach, researchers can represent a construct through a well-defined process, similar to the requirements of covariance-based techniques such as factor analysis (Deligonul, 2023). Such a technique allows researchers to later empirically test theoretical models, once data is available. It is argued to the frame-based approach is similar to the Linnaean hierarchy, which is used for arranging hierarchical categories based on common and varying features (Deligonul, 2023; Mayr, 1969). This method allows representing a construct (superordinate concept), based on its attributes, values of attributes, and subordinate (domain) traits. Similar to taxonomy groupings, it allows categorisation and groupings of attributes within a particular domain, based on shared commonalities and values of the attributes. This approach of categorisation is akin to capturing traits, that facilitates the understanding of an entity (Deligonul, 2023; Hug et al., 2016).

In order to illustrate the frame-based approach, let's consider an example of games, whereby certain characteristics, features, or attributes are classified under a particular subordinate trait (domain) (see Figure 1). The frame-based approach sub-classifies the various attributes of superordinate concept (i.e., attributes of games are classified into subordinate domains: chess, rock-paper-scissors, soccer, bridge). The subordinate domain (i.e., a category/type/domain of game) is determined with respect to the value of its relevant attributes (examples of attributes include playing material, rules, and conditions for ending). Terms belong to a subordinate concept ideally does not majorly overlap in referents (i.e., not all objects can be common across two games, while some features can be shared or common) (Deligonul, 2022).

Insert Figure 1 about here

Referring to the example of game, the superordinate concept (game) contains list of defining attributes and a value list. A subordinate concept is not connected to all attributes but only to some in value list. The selection of a specific attribute with its particular value defines a prototype of a subordinate dimension or domain. Thus, superordinate frames represents a concept (i.e., games), that generates mechanisms for subordinate concepts or sub dimensions (e.g., soccer) (Andersen et al., 1996). Likewise, in considering an organization as a superordinate concept, learning (an attribute) can be a firm level capability (subordinate

domain), and it can also be a firm's strategic orientation (subordinate domain). Similarly, agility (an attribute) can be classified and grouped into a strategy (subordinate domain), and it can also be a firm level capability (subordinate domain) for a particular type of organization.

Further, the frame model captures the relations of attributes within the superordinate concept, and specifies its domain based on the values and nature of the attributes. The frame representation divides attributes into different value levels. A value can also be positive or negative, high and low, and it can even be a characteristic such as short or tall representing an instance in that attribute (Chen, 2002; Khan et al., 2024). As a result, attributes within a superordinate concept can be functionally unequal. The model representation reveals the mechanisms behind the contrastive relations of attributes that classifies them within a particular domain.

3.2. The importance and advantage of frame-based method

The frame-based approach links relationships of attributes with a concept at an abstract level, from superordinate i.e., a broad concept (born global in context of this study) to subordinate levels i.e., domain/category/dimension (defining nature, orientations, capabilities, resources, strategic action). Please refer to Chen (2002)'s frame approach for further details.

The purpose of the frame-based approach is to present a clear framing of a concept, emanating from the key literature (Khan et al., 2024). This is a taxonomic approach, which stems from classifications and grouping. The advantage of adopting this approach lies in providing a typology-based information on defining attributes of a concept and their relationships to domains or dimensions. This approach allows presenting an integrated and synthesized knowledge of a concept, drawing information from relevant literature. By adopting this approach, it allows the identification and classification of attributes of a concept, that enables the researchers to develop informed conceptual models for empirical testing (Deligonul, 2023).

According to Deligonul (2023), a frame-based approach is appropriate for capturing and representing a concept that is hard to directly observe, and often represented through its manifest indicators. In this regard, the frame-based approach allows providing representation of the born global phenomenon, enabling researchers to understand its defining attributes across varying dimensions. This is important as conceptual problems often stem from poor definitions and measurements of a concept e.g., due to the use of invalid indicators (Bollen, 2017). Further, Deligonul (2023) emphasized its usefulness for identifying and categorizing attributes. By clearly defining or indicating manifest variables, it allows researchers to account for potential measurement errors (ibid). Further, by providing a clear categorization of attributes, the approach allows researchers to account for the possible common variance shared the indicators (Deligonul, 2023; Marsh & Grayson, 1995). Deligonul (2023) further mentions that structural architecture of the framing allows researchers to gain insights into its underlying key features, processes, and defining properties. This helps in improving the theoretical models, prior to examining the structural relationships (Kline, 2023). Given many concepts can be multidimensional, Deligonul (2023) contends that this taxonomic approach facilitates tackling multidimensionality. Once empirical data are available, a researcher can then examine the contributions of each dimension, and how they interact and influence each other (Byrne, 2013; Deligonul, 2023). To this end, this typology development approach facilitates the organization and representation of knowledge on an important concept i.e., BGFs in context of this present study.

According to Khan et al. (2024), a distinction of the frame-based approach compared with other widely adopted methods in the business management literature lies in their respective foci and objectives. For example, bibliometrics often rely on quantitative

techniques for description, evaluation, and monitoring of trends or patterns in published studies, the method includes citation analysis, co-citation analysis, bibliographic coupling, co-author and co word (Zupic & Čater, 2015). Contrary to this, the frame-based approach provides a meaningful definition and conceptualization by classifying a concept's attributes into respective dimensions. The framing helps in organizing knowledge as opposed to evaluating previous literature (Khan et al., 2024). Therefore, the frame method fits the aim of this study. Another widely used method is content analysis, which deals with the study of textual documents, visuals, arts, images, and interviews, that involves coding and interpretation of the data (Gaur & Kumar, 2018; Krippendorff, 2018; Sonpar & Golden-Biddle, 2008). Hence, this approach also does not fit the aim of the present study. The frame methodology is a suitable method for categorising traits based on characteristics and relationships (Khan et al., 2024). Although these aforementioned methodologies undoubtedly contribute to the business management literature, at the same time, they are applied to address different nature of research objectives and serve different purposes (ibid).

3.3. Applying the frame-based method to the born global phenomenon

The present study operationalizes the attributes of BGFs using the frame-based methodological approach. The process allows to delineate a domain of measurable attributes that can be used for operationalizing a concept (termed as super-ordinate concept) into different domains or categories (referred to as subordinate concepts or domains) (Deligonul, 2022). In simple terms, a super-ordinate is the major phenomenon or concept under examination (i.e., the born global phenomenon in context of this study) and subordinate levels are the major classification, domains, or dimensions (i.e., defining characteristics; orientations; capabilities; resources; and strategies/actions). The attributes are the bundle of measurable indicators, whereby their scaling and associations help in developing an explicitly clear mental schema in relation to a particular concept.

Bollen (2017) argues that in providing a conceptual definition of a construct, dimensions, justification for indicators belonging to a particular dimension, and their measurements are important in ascertaining reliability and validity. Applying the discussion in context of BGFs conceptualization, the capabilities are distinct from strategic action of BGFs, and they should not overlap. The attributes and their respective values help in categorizing them into the five subordinate domains.

Using the frame-based approach, we treated BGFs as the superordinate concept, and categorized attributes of BGFs into different subsets or domains (subordinate concepts). We looked at how these attributes are examined in the literature; accordingly, we assigned values to these attributes that helps in defining the success of BGFs. The major studies in BGFs argue that nature, orientations, capabilities, resources, and strategies, are the most salient domains (Cavusgil & Knight, 2015; Knight & Cavusgil, 2005b). Accordingly, we identified and classified the attributes of BGFs under the salient subordinate domains: defining characteristics, orientations, capabilities, resources, and strategic actions.

We delved into the literature in developing an inventory of commonly studied and defining attributes of BGFs and for assigning them within their respective subordinate domains. Our inclusion criteria was seminal papers and views on born global literature (Cavusgil & Knight, 2015; Knight & Cavusgil, 2024; Knight & Cavusgil, 2004; Knight & Cavusgil, 2005a; Knight & Liesch, 2016) and extant literature covered in section 2.1.1 to 2.15. In doing so, the present study is not confined to a particular journal and time period like a systematic review.

Notable contributions on international new ventures (INVs) have been made following the introduction of this concept by McDougall et al. (1994). However, there are some differences compared to the concept of born global. INVs are defined as “*businesses*

organisations that, from inception, seek to derive significant competitive advantage from use of resources and the sales of outputs in multiple countries” (McDougall et al., 1994, p. 49). BGFs are rapid and early internationalising firms that possess characteristics such as being young, firm as unit of analysis, employ exporting as an international entry mode (Cavusgil & Knight, 2015). The INVs’ definition potentially encompasses young, internationalising firms and new ventures launched in older established multinationals, with a range of value chain activities e.g., foreign manufacturing, and various entry strategies, including foreign direct investment (Oviatt & McDougall, 2005b). The present work is specifically based on the born global conceptualisation of Cavusgil and Knight (2015).

4. KEY FINDINGS AND CONTRIBUTIONS

Figure 2 illustrates the application of frame-based methodology in the context of BGFs. Applying this methodological approach in IB context, a key finding of this paper is presenting a framing of extant defining attributes studied in born global literature. Specifically, this paper classifies the collection of attributes under five distinct domains that are widely examined in the BGFs literature. By doing so, the paper presents a clear conceptualization through typology development, as there has been calls for IB scholarships in developing typologies for bringing conceptual clarity, justifying the dimensions (Allen et al., 2022). This typology of attributes offers a fine-grained view of extant scholarly findings regarding the born global phenomenon. The present study contributes to bringing conceptual clarity to the born global concept by presenting the most defining and prevailing characteristics identified from the extant literature review.

Insert Figure 2 about here

The seminal works on early internationalization, and over time future developments, have considered the internationalization process of BGFs and its contributing factors (Jones & Coviello, 2005; Paul & Rosado-Serrano, 2019; Prieto-Sánchez & Merino, 2022). The key defining attributes of BGFs and the classification of those attributes under different domains has not received attention, despite the importance for bringing conceptual clarity to it. The increasing and long-standing scholarly interest in born global phenomenon has inspired this study, and accordingly we present a fine-grained typology of born global attributes using a unique methodological approach. Accordingly, the present study brings the following important contributions.

First, in a recent retrospective view on BGFs, Cavusgil and Knight (2015) argue that it has now become a prevalent phenomenon that is witnessed across many countries and industries. Yet clarity in defining BGFs is needed i.e., developing understanding on the key attributes associated with this phenomenon (Knight & Cavusgil, 2024). The present study provides a conceptual clarity to this critically important IB phenomenon in terms of its defining characteristics, orientations, capabilities, strategies, and resources. This helps to present a refined view of this phenomenon, based on its widely agreed properties, derived from the literature. It is important to note that attributes included in the framing are those which are commonly studied and concurred as defining characteristics in the extant literature. This approach does not seek to integrate new, but rather juxtaposes the important and compatible, elements of BGFs and provides a holistic bird’s eye view on the phenomenon.

Second, this process of identifying the key attributes and their classification under different domains helps to enhance the understanding of the conceptualization of the born global phenomenon. Third, a methodological advancement can be obtained by crafting or transferring a method to a firm’s context for bringing a conceptual clarity (Bergh et al., 2022). To this end, our methodology serves well for this purpose. By adopting this

methodology, it helps in organizing knowledge on the key attributes and major domains in the BGFs literature.

This frame-based approach is an initial step that facilitates the researchers for accurately selecting the measures of a latent construct for structural and measurement models (Deligonul, 2023). This is primarily because framing allows a nuanced understanding and defining of a complex concept or construct (Khan et al., 2024). Once data are made available, scholars can make use of goodness-of-fit indices, such as the chi-square test, comparative fit index (CFI), root mean square error of approximation (RMSEA), and others indices in assessing the model's validity and reliability (Deligonul, 2023; Hu & Bentler, 1999). Finally, as presented in the next section, it guides relevant directions for future contributions.

5. GUIDELINE FOR FUTURE WORK

The frame-based approach presents the predominantly studied attributes under the classification of five dimensions i.e., the defining nature of BGFs, capabilities, resources, orientations, and strategic move. However, on a comparative basis, the extent to which these five dimensions contributes to BGFs success should be empirically validated. Scholars can examine whether empirical data obtained from confirmatory factor analysis support the five dimensions presented in our typology. Further, the study sets a basis for future work to bring clarity on whether the attributes within a domain are independent of each other and the extent to which one is more important than others. As an example, some scholars argue that entrepreneurial orientation is the most defining feature of BGFs (Bylund & McCaffrey, 2017; Kuivalainen et al., 2007). Others contend that managerial commitment is most important (Gabrielsson et al., 2008). Yet another group asserts that learning orientation is most pertinent to the born global phenomenon (Jantunen et al., 2008). Future research can empirically validate these convictions in a single study, and determine the most prominent attribute of BGFs, while considering the contextualization in examining the efficacy of the attributes, i.e., in a range of country and industry settings.

This study presents a typology of attributes in born global literature. Future studies can apply cluster analysis approach to delineate the efficient number of domains/clusters, such as using dendrogram and agglomeration distance coefficients in hierarchical methods (Punj & Stewart, 1983; Yim & Ramdeen, 2015). Future studies should also examine how certain dimensions may be more or less effective across pre, during, and post internationalization phases.

It was predicted that smaller firms would participate actively in IB activities such that it becomes a part of the international business norm (Knight & Cavusgil, 1996), and this estimation has proven largely true in 2020s such that BGFs have become a mainstream phenomenon (Knight & Cavusgil, 2024). A longitudinal study on the efficacy of different attributes can provide deeper insights into the evolution of born global success. Scholars can also determine which capabilities sustain over time and remain efficacious for BGF success.

The frame approach can be applied for refining other major constructs or concepts. We propose that future studies can adopt the frame-based methodology for comparing the attributes of success of BGFs with traditional exporting and micro multinationals enterprises. In comparative studies on firm types (e.g., born global vs traditional exporting ventures vs micro multinationals), scholars can use frame approach as a complementary method with other traditional methods such as survey for data collection. In this case, a frame method can be used in identifying the varying and overlapping attributes (between BGFs and other types of firms) as a preliminary study, based on the extant literature review. This can guide the development of framework for empirical testing using a survey methodology.

In defining internationalization strategies of BGFs, there are some discrepancies in terms of their regional internationalisation (Cavusgil & Knight, 2015; Lopez et al., 2009) and

internationalisation to the distant markets (Kuivalainen et al., 2007). Future studies can possibly explore this issue considering various countries and industries' settings, entry timing, and formal and informal institutional conditions.

It is argued that BGFs literature has not yet reached the advanced stages, and that there are still a number of important relationships to be explored (Knight & Cavusgil, 2024). While scholars have examined the key capabilities such as marketing, networking, learning capabilities, there is also a potential for exploring the other possible drivers of BGF success, such as international marketing agility. This is an under-explored dynamic capability in context of BGFs, despite it is highlighted as a critical capability for the exporting firms' competitiveness (Khan, 2020). Given BGFs are exposed to the different socio-political and institutional environments, scholars can also explore the efficacy of their non-market (social and political) strategies in navigating through the social and political challenges of the host markets. Their socio-political legitimacy building strategies in advanced and emerging markets can be explored. Scholars can also consider how traditional born global firms' attributes and major domains examined in the extant literature differ from platform/digital business model based born global firms. This would allow the researchers to compare their attributes and identify gaps for advancing the literature. Scholars can also apply the frame-based methodology for typology developments, as typologies are considered as important tools in theory building (Arabi & Rahimi, 2020).

Finally, there is a scope for examining the comparative effectiveness of BGF attributes when the firms originate from developing economies vs advanced economies markets and enter similar and substantially different markets. Specifically, scholars can examine the efficacies of BGF attributes (e.g., international entrepreneurial orientation) stemming from developing economies markets entering into i) advanced markets and ii) other developing markets, as well as BGFs stemming from advanced markets entering into iii) developing markets and iv) other advanced markets. Scholars may also compare the attributes for different types of emerging economies e.g., frontier markets vs relatively advanced emerging markets.

REFERENCES

- Allen, M. M., Wood, G., & Demirbag, M. (2022). Developing theoretically informed typologies in international business: Why we need them, and how to do it. *Journal of International Business Studies*, 53(9), 2133-2146.
- Andersen, H., Barker, P., & Chen, X. (1996). Kuhn's mature philosophy of science and cognitive psychology. *Philosophical Psychology*, 9(3), 347-363.
- Arabi, S. M., & Rahimi, S. (2020). Typology as a Theory Building Tool in Management. *Revista Gestão & Tecnologia*, 20, 203-222.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barsalou, L. W. (2012). Frames, concepts, and conceptual fields. In *Frames, fields, and contrasts* (pp. 21-74). Routledge.
- Baum, M., Schwens, C., & Kabst, R. (2015). A latent class analysis of small firms' internationalization patterns. *Journal of World Business*, 50(4), 754-768.
- Bergh, D. D., Boyd, B. K., Byron, K., Gove, S., & Ketchen Jr, D. J. (2022). What constitutes a methodological contribution? In (Vol. 48, pp. 1835-1848): SAGE Publications Sage CA: Los Angeles, CA.
- Bollen, K. A. (2017). Political Democracy: Conceptual and Measurement Traps. On Measuring Democracy: Its Consequences and Concomitants: Conference Papers,

- Braunerhjelm, P., & Halldin, T. (2019). Born globals—presence, performance and prospects. *International Business Review*, 28(1), 60-73.
- Buckley, P. J. (2002). Is the international business research agenda running out of steam? *Journal of International Business Studies*, 33, 365-373.
- Bylund, P. L., & McCaffrey, M. (2017). A theory of entrepreneurship and institutional uncertainty. *Journal of business venturing*, 32(5), 461-475.
- Byrne, B. M. (2013). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.
- Cannone, G., & Ughetto, E. (2014). Born globals: A cross-country survey on high-tech start-ups. *International Business Review*, 23(1), 272-283.
- Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46, 3-16.
- Cerrato, D., & Piva, M. (2015). The effect of global orientation on the performance of international new ventures: evidence from Italy. *Management International Review*, 55, 857-883.
- Chen, X. (2002). The 'platforms' for comparing incommensurable taxonomies: A cognitive-historical analysis. *Journal for general philosophy of science*, 33(1), 1-22.
- Chetty, S., & Campbell-Hunt, C. (2004). A strategic approach to internationalization: a traditional versus a "born-global" approach. *Journal of International Marketing*, 12(1), 57-81.
- Coviello, N. (2015). Re-thinking research on born globals. *Journal of International Business Studies*, 46, 17-26.
- Covin, J. G., & Miller, D. (2014). International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions. *Entrepreneurship theory and practice*, 38(1), 11-44.
- Deligonul, S. (2022). Fine-tuning a Construct for Higher Coherence and Validity: A Frame-Based Approach. *Working paper 20221115, Available from Research Gate*, 1-19.
- Deligonul, S. (2023). Distinctions of Frame-Based Approach as A Method of Construct Development (Working Paper 20230617). *Available from Research Gate*, 1-11.
- Efrat, K., & Shoham, A. (2012). Born global firms: The differences between their short-and long-term performance drivers. *Journal of World Business*, 47(4), 675-685.
- Falahat, M., Knight, G., & Alon, I. (2018). Orientations and capabilities of born global firms from emerging markets. *International Marketing Review*, 35(6), 936-957.
- Freeman, S., & Cavusgil, S. T. (2007). Toward a typology of commitment states among managers of born-global firms: A study of accelerated internationalization. *Journal of International Marketing*, 15(4), 1-40.
- Freeman, S., Edwards, R., & Schroder, B. (2006). How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, 14(3), 33-63.
- Freixanet, J., & Federo, R. (2022). When born globals grow up: A review and agenda for research on the performance of maturing early internationalizers. *Management International Review*, 62(6), 817-857.
- Frydrych, D. (2017). Down the methodological rabbit hole. *Crítica (México, DF)*, 49(147), 41-73.
- Gabrielsson, M., & Kirpalani, V. M. (2004). Born globals: how to reach new business space rapidly. *International Business Review*, 13(5), 555-571.

- Gabrielsson, M., Kirpalani, V. M., Dimitratos, P., Solberg, C. A., & Zucchella, A. (2008). Born globals: Propositions to help advance the theory. *International Business Review*, 17(4), 385-401.
- Gassmann, O., & Keupp, M. M. (2007). The competitive advantage of early and rapidly internationalising SMEs in the biotechnology industry: A knowledge-based view. *Journal of World Business*, 42(3), 350-366.
- Gaur, A., & Kumar, M. (2018). A systematic approach to conducting review studies: An assessment of content analysis in 25 years of IB research. *Journal of World Business*, 53(2), 280-289.
- Gerschewski, S., Rose, E. L., & Lindsay, V. J. (2015). Understanding the drivers of international performance for born global firms: An integrated perspective. *Journal of World Business*, 50(3), 558-575.
- Hagen, B., & Zucchella, A. (2014). Born global or born to run? The long-term growth of born global firms. *Management International Review*, 54, 497-525.
- Hashai, N., & Almor, T. (2004). Gradually internationalizing 'born global' firms: an oxymoron? *International Business Review*, 13(4), 465-483.
- Hennart, J.-F., Majocchi, A., & Hagen, B. (2021). What's so special about born globals, their entrepreneurs or their business model? *Journal of International Business Studies*, 52(9), 1665-1694.
- Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Hug, L. A., Baker, B. J., Anantharaman, K., Brown, C. T., Probst, A. J., Castelle, C. J., Butterfield, C. N., HERNSDORF, A. W., AMANO, Y., & ISE, K. (2016). A new view of the tree of life. *Nature microbiology*, 1(5), 1-6.
- Jantunen, A., Nummela, N., Puumalainen, K., & Saarenketo, S. (2008). Strategic orientations of born globals—Do they really matter? *Journal of World Business*, 43(2), 158-170.
- Jones, M. V., & Coviello, N. E. (2005). Internationalisation: conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36, 284-303.
- Khan, H. (2020). Is marketing agility important for emerging market firms in advanced markets? *International Business Review*, 29(5), 101733.
- Khan, H., Ozkan, K. S., Deligonul, S., & Cavusgil, E. (2024). Redefining the organizational resilience construct using a frame based methodology: A new perspective from the ecology based approach. *Journal of Business Research*, 172, 114397.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- Knight, G., & Cavusgil, S. T. (2024). A Path Forward for Research on Born Global Firms. In *Key Developments in International Marketing: Influential Contributions and Future Avenues for Research* (pp. 55-72). Springer.
- Knight, G., & Khan, H. (2024). Born global firms. In *Encyclopedia of International Strategic Management* (pp. 14-17). Edward Elgar Publishing.
- Knight, G., Koed Madsen, T., & Servais, P. (2004). An inquiry into born-global firms in Europe and the USA. *International Marketing Review*, 21(6), 645-665.
- Knight, G. A., & Cavusgil, S. T. (1996). The born global firm: A challenge to traditional internationalization theory. *Advances in international marketing*, 8(1), 11-26.

- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35, 124-141.
- Knight, G. A., & Cavusgil, S. T. (2005a). A taxonomy of born-global firms. *MIR: Management International Review*, 15-35.
- Knight, G. A., & Cavusgil, S. T. (2005b). A taxonomy of born-global firms. *Management International Review*, 15-35.
- Knight, G. A., & Liesch, P. W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51(1), 93-102.
- Kornmesser, S. (2018). Frames and concepts in the philosophy of science. *European Journal for Philosophy of Science*, 8, 225-251.
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.
- Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2012). Start-up patterns of internationalization: A framework and its application in the context of knowledge-intensive SMEs. *European Management Journal*, 30(4), 372-385.
- Kuivalainen, O., Sundqvist, S., & Servais, P. (2007). Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business*, 42(3), 253-267.
- Lopez, L. E., Kundu, S. K., & Ciravegna, L. (2009). Born global or born regional? Evidence from an exploratory study in the Costa Rican software industry. *Journal of International Business Studies*, 40, 1228-1238.
- Loufrani-Fedida, S., Hauch, V., & Elidrissi, D. (2019). The dynamics of relational competencies in the development of born global firms: A multilevel approach. *International Business Review*, 28(2), 222-237.
- Luostarinen, R., & Gabrielsson, M. (2006). Globalization and marketing strategies of born globals in SMOPECs. *Thunderbird International Business Review*, 48(6), 773-801.
- Marsh, H. W., & Grayson, D. (1995). Latent variable models of multitrait-multimethod data. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 177-198). Sage Publications, Inc.
- Martin, S. L., Javalgi, R. G., & Cavusgil, E. (2017). Marketing capabilities, positional advantage, and performance of born global firms: Contingent effect of ambidextrous innovation. *International Business Review*, 26(3), 527-543.
- Mayr, E. (1969). *Methods and principles of systematic zoology*. McGraw-Hill.
- McCormick, M., & Somaya, D. (2020). Born globals from emerging economies: Reconciling early exporting with theories of internationalization. *Global Strategy Journal*, 10(2), 251-281.
- McDougall, P. P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of business venturing*, 9(6), 469-487.
- Moen, Ø., & Servais, P. (2002). Born global or gradual global? Examining the export behavior of small and medium-sized enterprises. *Journal of International Marketing*, 10(3), 49-72.
- Oviatt, B. M., & McDougall, P. P. (2005a). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship theory and practice*, 29(5), 537-553.
- Oviatt, B. M., & McDougall, P. P. (2005b). The internationalization of entrepreneurship. *Journal of International Business Studies*, 36, 2-8.

- Patel, P. C., Criaco, G., & Naldi, L. (2018). Geographic diversification and the survival of born-globals. *Journal of Management*, 44(5), 2008-2036.
- Paul, J., & Rosado-Serrano, A. (2019). Gradual internationalization vs born-global/international new venture models: A review and research agenda. *International Marketing Review*, 36(6), 830-858.
- Presutti, M., Cappiello, G., & Johanson, M. (2020). Analysing social capital and product innovativeness in the relationship evolution of born-global companies the mediating role of knowledge acquisition. *International Entrepreneurship and Management Journal*, 1-25.
- Prieto-Sánchez, C. J., & Merino, F. (2022). Incidence of cultural, economic, and environmental factors in the emergence of born-global companies in Latin America. *Global Strategy Journal*, 12(2), 245-272.
- Punj, G., & Stewart, D. W. (1983). Cluster analysis in marketing research: Review and suggestions for application. *Journal of Marketing Research*, 20(2), 134-148.
- Rennie, M. W. (1993). Born global. *The McKinsey Quarterly*(4), 45-53.
- Rodríguez-Serrano, M. Á., & Martín-Armario, E. (2019). Born-global SMEs, performance, and dynamic absorptive capacity: evidence from Spanish firms. *Journal of Small Business Management*, 57(2), 298-326.
- Sharma, D. D., & Blomstermo, A. (2003). The internationalization process of born globals: a network view. *International Business Review*, 12(6), 739-753.
- Sonpar, K., & Golden-Biddle, K. (2008). Using content analysis to elaborate adolescent theories of organization. *Organizational Research Methods*, 11(4), 795-814.
- Trudgen, R., & Freeman, S. (2014). Measuring the performance of born-global firms throughout their development process: The roles of initial market selection and internationalisation speed. *Management International Review*, 54, 551-579.
- Weerawardena, J., Mort, G. S., Liesch, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42(3), 294-306.
- Yim, O., & Ramdeen, K. T. (2015). Hierarchical cluster analysis: comparison of three linkage measures and application to psychological data. *The quantitative methods for psychology*, 11(1), 8-21.
- Zander, I., McDougall-Covin, P., & L Rose, E. (2015). Born globals and international business: Evolution of a field of research. *Journal of International Business Studies*, 46, 27-35.
- Zhou, L. (2007). The effects of entrepreneurial proclivity and foreign market knowledge on early internationalization. *Journal of World Business*, 42(3), 281-293.
- Zhou, L., Barnes, B. R., & Lu, Y. (2010). Entrepreneurial proclivity, capability upgrading and performance advantage of newness among international new ventures. *Journal of International Business Studies*, 41, 882-905.
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429-472.

Figure 1 An example for frame-based approach presented in an adapted form, taken from Kornmesser (2018) work

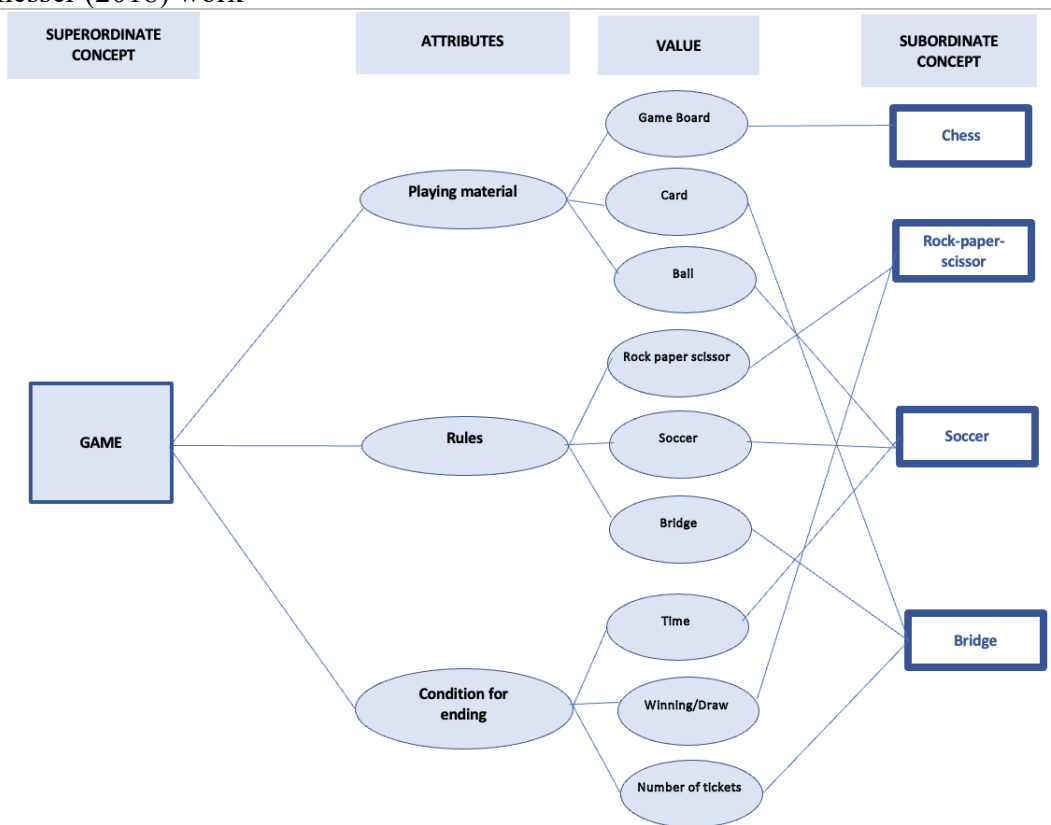
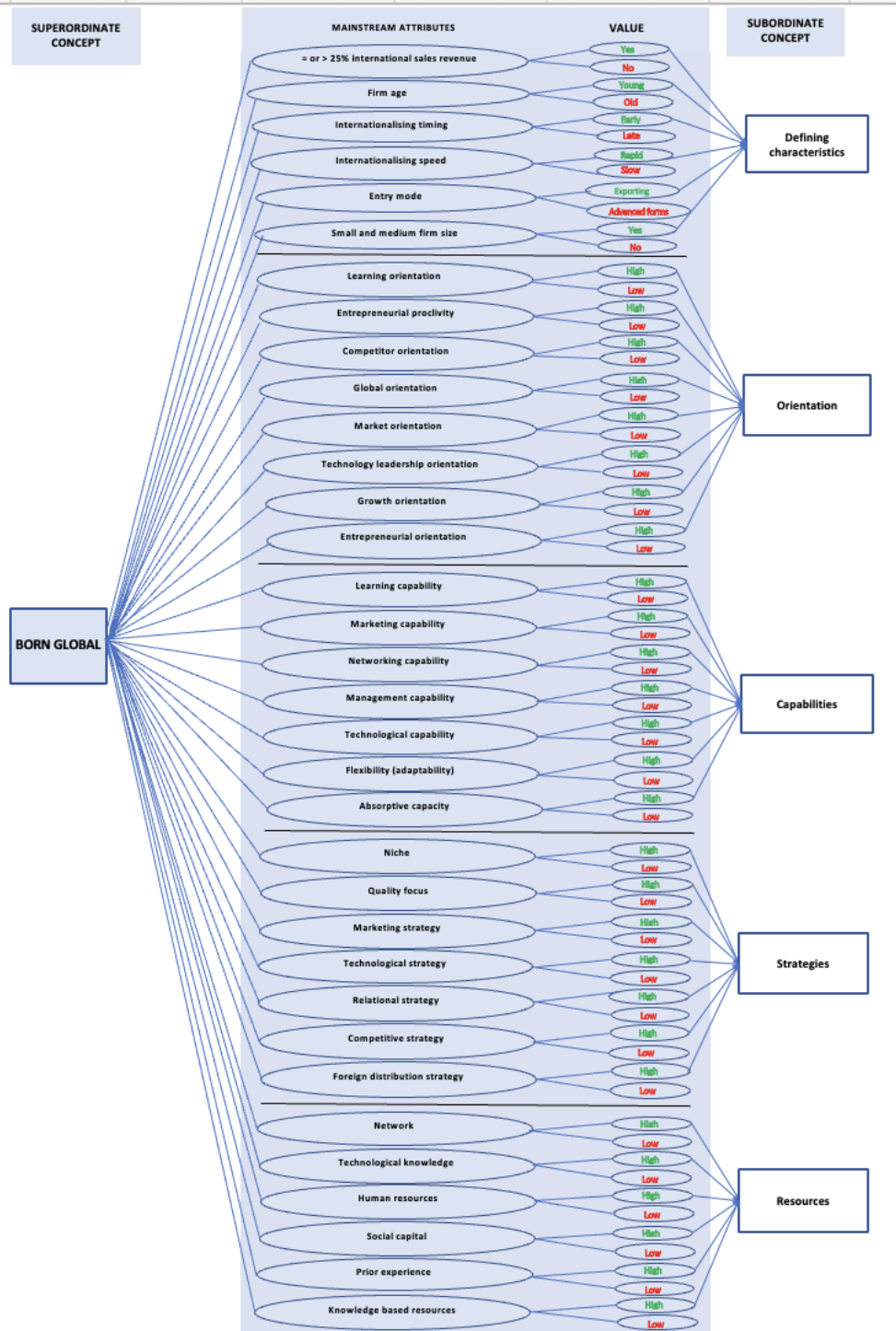


Figure 2: Frame-based View of Born Global Firms' Attributes



Source: Authors own work