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Roadmap for the internationalization of firms from emerging economies

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Abstract

The initial stages of internationalisation, prior to firms having established a firm position among international competitors, is an unexplored area of International Manufacturing and International Business literature. From the firm's point of view, the challenges start from the decision to internationalise: "should I stay or should I go?". Then the organizational challenge comes in: "organizing a company to do business on a global scale remains one of the most complex managerial responsibilities: choices must be made, challenges must be met and mind-sets must be transformed", as Galbraith (2000) points out. Those are the challenges faced by firms that are currently considering to become international. In particular that includes firms from the emerging countries in general and the BRIC in particular.

The aim of this paper is to present an initial version of a Roadmap for the internationalization of firms. It is built from the outcomes of a multidisciplinary research project that studied Brazilian Multinationals for more than three years.

To study the internationalization process of Brazilian firms, different decision areas were considered: operations management, knowledge management, competence management, R&D management, global project management, socio-environmental management and organizational structure. The aim was to understand how firms should develop management systems in those areas for effective internationalization. Field research was generally initiated with preliminary in-depth case studies, to gain the initial insights about the phenomenon. Exploratory surveys were then built and applied to the most important Brazilian Multinationals. The knowledge gathered about internationalization processes is being consolidated into a unique roadmap.

The roadmap considers three time horizons (prior to internationalization, entry phase and expansion) and the decisions related to the different organizational dimensions, previously mentioned. Therefore, the roadmap synthesizes the most relevant findings and provides guidance for firms interested in going international.

1. Introduction: late-movers into international markets

For the global economy, the growing importance of companies from emerging countries, especially from the BRIC (Brazil, Russia, India and China) represents a "third wave of internationalization". The first wave was generated by the expansion of U.S. and European companies during the 1950s and 1960s and the second wave was generated by the emerging Japanese companies during the 1980s. As a consequence, the new scenario is characterized by the presence of a wider variety of new global players, including the former ones and the new multinationals from the emerging countries (Ramamurti and Singh, 2009; Goldstein, 2007).

This rapid growth of companies from emerging countries took by surprise policy makers, researchers, and even for managers of other multinational companies, generating new research possibilities. Companies that were once considered laggards, performing in less developed contexts, suddenly started to challenge the global leaders. This phenomenon generated new research questions: does multinationals from emerging countries have distinct characteristics from the classic multinationals? what factors justify their growing competitiveness at global markets? These questions generated new research approaches, capturing the common features of these new multinationals (Mathews, 2006; Cuervo-Cazurra, 2007, Guillen and Garcia-Canal, 2009). Moreover, prompted a new challenge: how do companies from emerging countries that have not yet started their internationalization processes can take advantage from the experience of their forerunners?

This paper proposes a roadmap for the internationalization of firms, based on the experience of Brazilian multinationals. Six of them are ranked by Fortune magazine among the 500 largest in the world. The Boston Consulting Group (2009) lists 14 Brazilian companies among the 100 new global challengers. For Ernst & Young (2009) the large Brazilian companies have improved their position in the ranking of the 300 largest companies on the planet and those that have a higher market valuation in the first half of 2009. The World Investment Report lists three Brazilian multinationals among the 50 largest MNEs from developing countries (UNCTAD, 2008).

2. Research background: is there a theory about late-moving into international markets?

The mainstream in the International Business and Operations Management was mainly inspired by and sought contributions to companies from the advanced countries (USA and Europe).

In the 1950s and 1960s, the increased visibility of the MNE phenomenon and the hegemonic presence of American companies led to the formulation of theories which conceptualized the MNE as “a company that engages in foreign direct investment and that has, or in some way controls, value-adding activities in more than one country” (Dunning and Lundan, 2008).

These theories seek to answer the question “Why do companies make foreign direct investments?” The research conducted back then relied on large data bases about financial flows, mainly. The answers pointed to two variables: market power and technological leadership (Hymer, 1960; Vernon, 1966).

The second stream of research emphasised the behavioural aspects of internationalisation. Inspired by former works from “behavioural economists”, the Nordic School, rather than conceptualising internationalisation as an outcome of a rational decision-making process, proposes that the internationalisation of the firm is a process composed of a set of sequential steps strongly dependent on knowledge acquired from experience

The 1970s was also a point of inflexion in the history of MNEs. At that time, western firms, especially the American ones, started to lose their competitiveness in the international arena, whereas Asian enterprises, in particular the Japanese ones, emerged as important global players.

In 1980, Alfred Chandler, one of the best known authors in the area of strategy and structure, on the basis of his research into American enterprises, concluded that “the modern industrial enterprise did not grow by producing something new or by producing it in a different way; it grew by adding new units of production and distribution, by adding sales and purchasing offices, by adding facilities for producing raw and semi-finished materials, by obtaining shipping lines, railroad cars, pipelines and other transportation units, and even by building research laboratories” (quoted in Dunning and Lundan, 2008:156). In other words, firms increasingly took on organizational functions previously shouldered by the market, reducing, for instance, licensing agreements.

Having first identified this trend, Buckley and Casson (1976:36) related it with the then emerging theory of transaction cost, in order to study the reasons that led companies to become international. In discussing, markets versus hierarchies they proposed that firms tend to internalize flows within the firm, whenever the transaction costs are more favourable.

Finally, it is important to recall Dunning’s Eclectic Paradigm of International Production, that was first published in 1977 and subsequently has been expanded to include new variables that were considered to explain new aspects and dimensions of the internationalization phenomenon.

Although the above theories were revised and updated along time, it is still doubtful whether they are adequate to explain the phenomenon of the internationalization of firms from the emerging economies.

That phenomenon is occurring in a radically distinct environment. Among other factors, the following must be mentioned: i) the excess capacity for the production of goods and services creates a fierce competition among the global players and require a permanent orientation to innovation; ii) the long established multinationals from the advanced countries are in a process of revising and redefining their organisational architectures, focussing on the high value adding activities, and seeking to establish and command global networks; iii) governments are heavily influencing the internationalisation process, aiming to improve the achievement of their national objectives; and iv) the economy is in a stage where the institutional mechanisms that rule international trade are being consolidated at a global, regional and national levels. Authors such as Mathews (2006), Cuervo-Cazurra (2007), Guillen and Garcia-Canal (2009), admit that new theoretical approaches are needed to accurately capture the dynamics of the new multinationals from emerging countries.

3. The GINEBRA Project: Management Systems for the Internationalization of Brazilian Enterprises

In 2004, a group of researchers from three different departments of the University of Sao Paulo started a project aiming to the development of Management Systems for the Internationalization of Brazilian Enterprises. Since at that time there was no established body of knowledge for the analysis of the phenomenon,, the group decided to explore each theme according to its own specialized approach, followed by a subsequent integration. The composition of the group led to the structuring of the project along seven issues:

- 1) Internationalization strategy and organizational structure
- 2) Knowledge management for internationalization
- 3) Competence management for internationalization
- 4) International R&D management
- 5) Management of global projects
- 6) Socio-environmental management and internationalization
- 7) Public policy for internationalization

Field research was generally initiated with preliminary in-depth case studies, to gain the initial insights about the phenomenon. Exploratory surveys were then built and applied to the most important Brazilian Multinationals. The knowledge gathered about internationalization processes is being consolidated into a unique roadmap.

The outcomes are currently being integrated through a Roadmap for Internationalization.

4. Roadmapping

Roadmapping approaches were originally used to align research and financial investments with corporate strategy (Phaal et al., 2003a). Developed at Motorola during the 1980s to support technology management and planning, the technique has been used to align technology and other resources with organizational goals in different contexts. Application of the roadmapping approach presents considerable challenges to the firms, because the roadmap itself, although simple in structure and concept, synthesises the final outcomes from a strategic planning process. Key challenges include keeping the roadmapping process alive on an ongoing basis, starting up the process and developing a robust method (Probert et al. 2004).

Roadmaps can be represented in different ways, and the most common approach was proposed by the European Industries Research Management Association (EIRMA), as presented in figure 1.

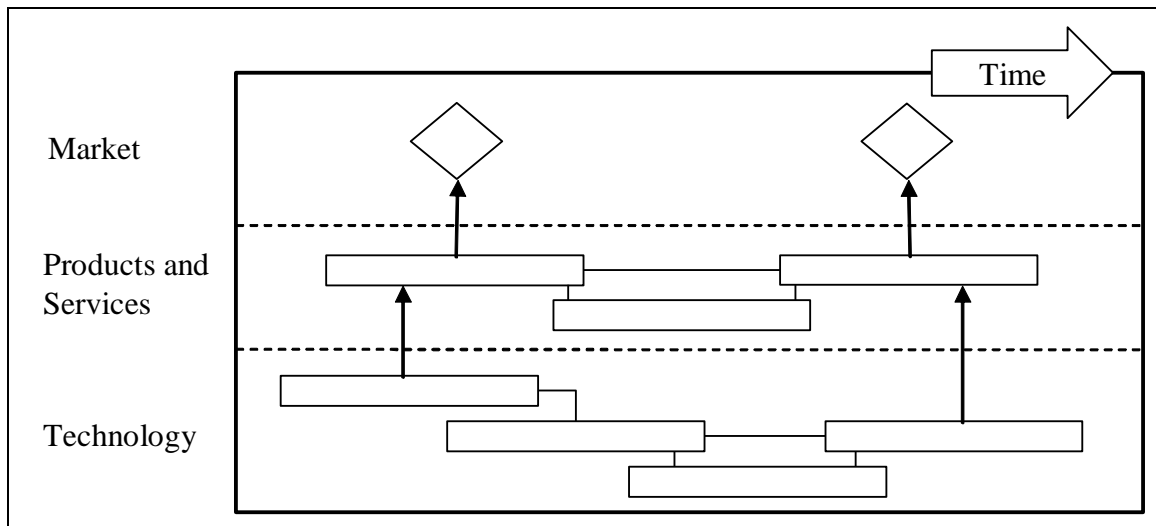


Figure 1 – General Technology Roadmap
Source: Phaal et al., 2003b

The generic roadmap is a time-based chart, including a number of different layers that typically include both market and technological perspectives.

The decision to adopt the Roadmapping approach for the internationalization process was motivated by the following aspects:

- *Landscape View*: the proposed roadmap provides a visual orientation for managers and researchers seeking for specific knowledge about the internationalization process. Therefore, exploring the whole picture provides knowledge about the most important concepts that should be considered for the decision process and clicking on a specific issue brings complementary information for the Roadmap user;
- *Flexibility*: the requirements to build a Roadmap include the development of a time perspective and representing the drivers/motivations (know why), the implementation/organisation (know how) and the resources (know what). This structure emerged from the interactions among the principal researchers.
- *Expandability*: the Roadmap makes possible the development of complementary informational structures to provide detailed information for the interested community. The proposed roadmap works with hyperlinks, and each hyperlink conducts to specific contents, presented in the form of checklists, recommendations and links to other sources of information.

Next section presents the internationalization roadmap architecture and its content.

5. Roadmapping for new multinationals

The development of a Roadmapping approach aiming to contribute for the decision process at companies considering internationalization comprehended three stages: designing the roadmap architecture, defining the roadmap content and formulating guidelines for each roadmap content previously identified.

The architecture of the internationalization roadmap was designed and validated during four meetings. Based on the guidelines proposed by Phaal et al. (2003a), two main issues were observed during this process. First, the roadmap should be developed using a timeline perspective, starting with the company motivation and moving towards its international vision. Second, the layers comprehended in the roadmap should be structured aiming to answer three questions: first, why the company intends to internationalize; second, what are the strengths and weaknesses will define corporate strategy; and finally, how can the company plan its entry in new countries and establish a robust international business model.

The resulting architecture for the Roadmap and its content is presented at Figure 2. These concepts will be explored in detail in the next sections.

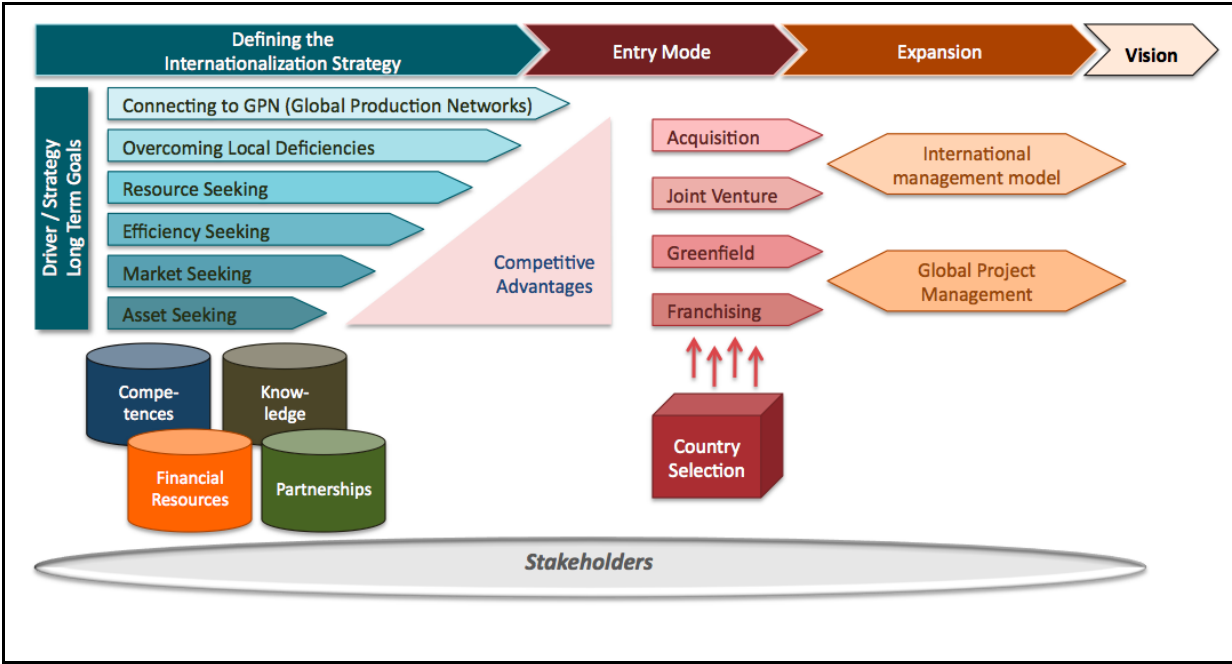


Figure 2 – Roadmapping for Brazilian MNE Companies
Source: Created by the Authors

- Defining the Internationalization Strategy

The starting point of the roadmap considers that a company is analyzing different possibilities to begin with its international operations. The Upsalla Model describing which are the stages that can be performed by these companies, including: exporting using third part companies, direct exportation, licensing, strategic alliances with foreign companies, franchising, establishment of offices to transact goods and services, establishing production unities and

finally, establishing an international research and development centre. The concept involved in this analysis is that the company will be more committed with its internationalization process according with the obtained results from the previous phases. Most of the Brazilian multinationals started with exportations, followed by the establishment of its commercial offices, before starting their production operations at other countries. This step reveals the options and eventually the sequence to become international.

The drivers for this internationalization process (“*know why*”) include the classic ones mentioned by Dunning (1993):

- *Resource Seeking*: some companies internationalize to gain access to better resources. These resources may include natural resources, human resources and financial resources. Obtaining access to better resources is the reason why companies started their operations in Brazil during the XIX century, and it is also the reason why some Brazilian companies are going abroad. Examples include companies that bought mineral mines to increase their exploitation capabilities, companies that established operations at China to minimize the costs with human resources and companies that established operations at countries where financial resources are more easily obtained than in Brazil.
- *Efficiency Seeking*: for some companies, the internationalization decision is related with obtaining global operational efficiency. Embraco, a Brazilian company that produces compressors, decided to establish subsidiaries at Europe and China and improved its deliverable capabilities for companies that assemble refrigerators. Automotive companies have been improving their efficiency with the implementation of internationalization strategies for some decades. In this context, Korea usually receives subsidiaries that produce small cars, Brazil receives subsidiaries for the production of small utilities and innovative models are developed and produced at advanced countries.
- *Market Seeking*: for some companies, the decision of internationalization is originated from the need of finding new customers. In this context, companies can produce an existing product or service for this new market, or can be more aggressive, introducing a new product or service for this new market. Marcopolo, a Brazilian bus manufacturer, started its production at South Africa with a joint venture with a local company. Existing buses were adapted for this market, minimizing the risks of this venture. However, to enter the European market, Marcopolo acquired a Portuguese factory and developed new products, because the European market demands higher quality standards, and the company needed to improve its basic functions, including new product development, production and commercialization. In some cases, entering a new market can be a reply to a competitor movement. For example, an European cement company acquired an Argentinean company to avoid the entry of Votorantin, a Brazilian cement company, at this market. To improve its position, Votorantin had to acquire new plants at te United States and Canada.
- *Asset Seeking*: for some companies, the decision to internationalize is caused by the need of accessing complementary or higher quality assets. For example, Sabo, a Brazilian company that produces auto parts, bought Kako, a german company, because of its research and development capabilities and its closeness to german universities.

Additionally, two other drivers emerged from the research work:

- *Connecting to Global Production Networks*: for some companies, the decision about internationalization relates with improving their position at the global production chains. These companies can be suppliers for global networks and internationalizing is necessary to obtain certain levels of quality for products and services, which are required by the other companies that operate in this chain, or the company can be an integrator of inputs from other companies and the internationalization may increase the ability of coordinating these suppliers. Examples include Brazilian software companies, which decided to internationalize to be closer to their global customers, automotive companies, which decided to internationalize with the acquisition of production plants to better serve north-american automotive companies, and Embraer, the Brazilian airplane manufacturer, which produces its executive jets at the United States.
- *Overcoming Local Deficiencies*: in certain cases, the internationalization process is motivated by the difficulties faced by the company in its domestic market, and becoming international is a solution to improve its competitiveness. Brazil is a country where international trade agreements are rare, and establishing operations in other countries is a way of benefiting from regional trade agreements. In this context, some companies started their operations at Mexico, aiming to reach the north-american market more easily.

- Defining the Entry Mode

Defining the entry mode is the second stage for the internationalization process of Brazilian companies. Different modes of entry include:

- *Acquisition*: in this entry model, a company buys other existing companies at international markets. The company gains rapid access to these markets, obtains products and trade marks already established and access to local suppliers and distribution channels. Some disadvantages include a greater exposure for economic and judicial risks, bigger entry costs and greater possibility of cultural conflicts. Brazilian multinationals largely prefer acquisitions as basis for their first entry, especially in more advanced countries.
- *Joint Venture*: the company finds partners to share capital and other resources, aiming to establish a new organization at the new country. Generally this partnership is deployed with local companies, but it can also include governmental authorities, other foreign companies or a mix of local and foreign partners. Accessing and exchanging knowledge with the local partner is the most important advantage in this type of entry mode, and sometimes it is the only manner to access some markets. The disadvantages include lack of plain control, potential conflicts about strategies and decisions and exposing strategic knowledge for international partners. Brazilian firms lack familiarity with that arrangement. However, they learn how to partner to increase operations in markets less developed than Brazil.
- *Greenfield*: in this entry mode a company starts its international operations from the scrap, building and implementing its new unit. There is a big possibility of control, and it is possible to benefit from fiscal advantages and investment incentives. There are bigger decision flexibility. However, in this entry mode the company needs more investment, there are restrictions in some markets and this is a slower entry mode. This option is adopted only by Brazilian MNEs which are experienced in their international operations.

- *Franchising*: franchising is a kind of agreement where the franchiser guarantees to the franchisee the right of use of a business concept and the trademark of a product or service, receiving payments for this. The agreement can include marketing plans, operational manuals, training and quality monitoring. For the franchisee, some advantages include the appliance of a mature business model, limited need for capital and acquisition of operational and management knowledge. However, this model creates a dependency from the franchiser, the incomes are fractionated and there is a constant monitoring and control. For the franchiser, some advantages include sharing management and operational risks with an operator that knows how to act locally, a bigger commitment from the franchisee and a smaller investment when comparing with other entry modes. Some disadvantages for the franchiser include smaller incomes, risk of loosing the know how about the business and potential conflicts with the franchisee. There are about 54 Brazilian enterprises adopting franchising as mode of entry.

For each phase of the internationalization process proposed in this roadmap, the company should have a clear understanding of how to manage its most valuable resources.

Assessing Resources for internationalization

The firm shall assess four of their resources to decide about the feasibility and provide support for the internationalization process:

Resource: organizational competences

Resource: knowledge

Resource: finance

Resource: partnerships

- Assessing Organizational Competences

A framework to identify organizational competences was developed as below.

Types of organisational competences	
functional competence	action and core function
Technological competence	add value to products and processes core functions are R&D and Engineering
Production competence	to do things (goods and services) core functions Production and Logistics
commercial competence	to sell (goods and services) core functions Marketing (Four Ps: pricing, publicity,), Delivery (Outbound Logistics, Distribution)
Clients' Relationship Management (CRM competence)	to bring a firm close to its customers; core function Marketing (Market Intelligence)
Supply Chain Management (SCM competence)	to implement and manage a network of suppliers core functions: Purchasing, Inbound Logistics
Human Resources Management competence	to capture, develop and compensate Human Resources core function: HRM
Financial competence	resource allocation and investment core function: Finance
Planning competence (Business Model)	to establish and implement business strategies core function: Planning
Organizational competence	to establish and implement management systems cultural capability: Organization

The study of Brazilian Multinationals revealed that the relative importance of those competences vary depending on the stage of internationalisation as shown in the Table below.

	Pre-internationalization	Entry phase	Expansion
1	R & D & E	Manufacturing	Marketing and Sales
2	Manufacturing	Organization	Client relationships
3	Client relationships	Human Resources	R & D & E
4	Organization (business model)	Planning	Manufacturing
5	Finance	R & D & E	Supply Chain Management
6	Information Technology	Marketing & Sales	Finance
7	Supply Chain Management	Client relationships	Organization
8	Planning	Finance	IT
9	Marketing and Sales	Information Tech	HR Management
10	HR Management	Supply Chain Management	Planning

The experience of Brazilian multinationals relates that success relies in having one of the three competences for value creation (Production, R&D&E, Marketing and sales) more developed than competitors. Usually for the Brazilian companies that competence is production. However, there are exceptions, like Embraer (the most important competence is new product development) and Ambev (Marketing and Sales).

Organizational competences are more affected by the internationalization process, since the management model changes from the national level to the international level. The company must have an adequate management model for the Brazilian context and evolve fast for an international business model, consistent and effective for its international expansion.

Managing human resources is the biggest challenge for the Brazilian multinationals. It is key during the entry phase, and, if there is no evolution, aiming to advance the international management of human resources, its expansion will be challenging.

- Assessing Financial Resources

Financial resources should be managed carefully during internationalization process. Some questions that must be addressed prior to internationalization include defining the sources of the resources for the investments, how cash flow will be managed and what kind of risk analysis will be performed. In the entry phase, the company should find financial sources, considering the financial performance and the politics and economic risks.

Finally, it is necessary to guarantee the alignment of the different stakeholders that support the internationalization process. The concepts that should be analysed should include a global mindset, an international entrepreneurship skill, international business competence and corporative governance.

- Assessing Partners (social networks)

The importance of social networks for the internationalization of firms is currently the cornerstone for the Nordic School of Internationalization. This dimension is still under study for the Brazilian case.

6. Final comments and future research

The adoption of the Roadmapping approach as a tool to provide support for firms to decide about internationalization looks very appropriate and fruitful. However, in this specific case, the fact that the research group has adopted the Roadmapping approach in the final stages of the project only represented a sensible drawback. That is due to the different analytical structures that were developed for each project and the difficulties to redirect the outcomes and conclusions along the lines of the roadmap. The pre-requisites of a shared view of the research object and the key concepts since the start of the project would have made the convergence much easier.

Notwithstanding, the roadmap method began to establish the basis for the convergence, a common ground for the final part of the research project. There are several points still to be addressed. The most important seems to be the applicability of the internationalization roadmap. Is it valid for any firm? Is it better to create a tool that might be customized, depending on the characteristics of the user?

At the final validation stage, the community of companies that participated in the GINEBRA project are being invited to visit the Roadmap page and to validate it, proposing new

considerations if it is appropriate. The Roadmap and its complementary information can be accessed at the University website (<http://www.pro.poli.usp.br/ginebra/internacional>)

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