
1. Introduction

This research will focus on global launch decisions. In particular it will investigate if it is possible to determine an optimal entry strategy in terms of timing (i.e. when to enter a particular market) and sequencing (i.e. which country to enter first, second, etc.).

In recent years, an increasing number of key industries such as automobile and motorcycle production, agricultural equipment, aerospace, military hardware, telecommunication, electronics and luxury consumer goods have become global in scope. Firms in these industries originate, produce, compete, and market their products worldwide. In 1992 more than 50% of 3M’s total revenue came from overseas operations. Similarly, the overseas sales of Nestle account for 80% of its total sales (N.N. in Business Week, 1990).

Products made by foreign competitors have now penetrated almost every market in the free world. For example, 39% of Japan’s total exports, 36% of Korea’s, 81% of Canada’s, and 87% of Mexico come into the United States (Iacocca, 1987). Similarly, major U.S. companies in various industries such as in aerospace, computer equipment, oil fields machinery, medical equipments, and chemicals, export a significant percentage of their products overseas (N.N in Business Week, 1990).

To transform global challenges into new opportunities into the emerging global marketplace, multinational firms are realising that the key to growth and survival is the continuous development and introduction of new products (Keegan, 1989; Samiee and Roth, 1992). However, the challenge facing a multinational firm is to develop a new product policy and strategy that is sensitive to market needs, competition, and company resources on a global scale.

Douglas and Craig (1992) observe that “Many large corporations are already involved in international markets and hence are making entry decision in the context of an existing network of international operation. But for small and medium size businesses who have not yet entered international markets, entry decisions constitute a critical path to internationalisation.

There are two major issues facing firms in their decisions on the global launching of new product. The first issue is the degree of standardisation of the product across different countries, markets and the other elements of the marketing mix (e.g., Samiee and Roth, 1992; Jain, 1989; Cavusgil, Zou and Naidu, 1993; Harris, 1994). The second is entry strategy choice. According to Douglas and Craig (1992): “…attention needs to be paid to the timing and sequencing of entry into international markets relative to competitor moves and the stage of market development. This should
include assessment of factors impacting the choice of incremental vs simultaneous entry into different country markets. The last issue is precisely the subject of this research.

So far, the international market entry literature has focused mostly on the choice of entry mode (see e.g. Anderson and Gatignon, 1986; Agarwal and Ramaswami, 1992; Pan and Tse, 2000). However, an entry strategy in international markets also involves selecting the best countries to introduce the new product, the sequence in which these countries should be approached, and the timing of entry into these markets (Douglas and Craig, 1992). With the exception of a study by Kalish, Mahajan and Muller (1995), these types of decisions have rarely been investigated.

For international marketing managers, however, the importance of these decisions are increasing because the time it takes to bring the new products to international markets becomes more critical due to the globalization of markets and competition. Therefore the objective of this research is to investigate what the optimal product launch strategy will be in terms of which countries to serve at what time.

2. Aims of this Study

Main Aims

The main aims of this study are:

(1) To investigate what the optimal product launch strategy will be in terms of which countries to serve and what time.
(2) To formulate a conceptual framework that describes the process of product launch in international markets including a complete set of variables that influence both the timing and sequence of entry into multiple foreign markets.

Secondary Aims

(1) To provide guidelines for international marketing managers who are responsible for making global launch decisions.
(2) Furthermore, this research study will act as a guide to management practitioners to assist or discriminate which variables are productive and counter productive in global launch decision making.
(3) To suggest some direction for future research.

To achieve the overall purpose of this study, this researcher (I) will address these research questions:

(1) What is the optimal entry in terms of
   (a) Timing, i.e., when to enter a country
   (b) Sequence, i.e. should managers use a sprinkler or waterfall strategy for the introduction of new products across countries.
(2) What economic and cultural factors influence the optimal timing and sequencing decisions?
(3) Do different categories and countries have consistently different times to launch new products?

The answers to these questions will assist entrants formulate better introduction strategies. This research also seeks to address these and other interesting questions raised previously.

3. Scientific relevance

This research relates to the research area that focuses on new product introductions in international markets. A large number of studies have been found that focus on strategic issues, such as introduction timing of a new product (see e.g. Golder and Tellis, 1993; Bayus, Jain and Rao, 1997; Krider and Weinberg, 1998; Shankar, 1999). These studies generally focus on the question if one should be an early or a late entrant in a particular market (pioneer versus follower), and how the decisions of competing firms influence this timing decision. However, these studies include only one market / country, i.e. the domestic country, and therefore do not indicate how first-mover advantages translate into an international context (Lieberman and Montgomery, 1998).

A study by Mascarenhas (1997), however, does investigate first-mover advantages in an international context. It examines entries by 187 firms into 68 international markets for four offshore drilling products over an 18-year period (1966-1984), and finds that a first entry (before other foreign entrants) results in higher long-term international market share and survival. The only conclusion that can be drawn from this study is that first-mover advantages also holds in international markets, a conclusion that is confirmed in a study by Pan, Li and Tse (1999). However, nothing can be concluded about the optimal timing and sequence of entering multiple foreign markets or the factors that influence these decisions.

The only study that provides some answers to the optimal entry timing and sequencing is a study by Kalish, Mahajan and Muller (1995). Using innovation diffusion models in a monopoly and competitive game theory framework, it analyzes under what market place conditions a waterfall (entering one market at a time) respectively sprinkler strategy (entering all target markets simultaneously) is optimal. The results suggest that in today’s market place a sprinkler strategy be strongly suggested, but that under certain circumstances, such as a very long product life cycle or weak competitors in the foreign market, a waterfall strategy may be the preferred strategy.

This study has, however, a number of potential limitations. First of all, it includes only two markets and two competitors in their analysis, which is not very realistic. Today, most large companies operate in many countries, all over the world, and face competition from both local and global players.
Moreover, they only discuss foreign marketplace conditions as influencing the choice between a waterfall and a sprinkler strategy, and do not pay attention to internal company or product-specific factors that may influence the possibility for an international roll out. Examples of such variables, that are not considered, are the level of standardization of the product, the degree of newness of the product, and the financial resources of the company.

Furthermore, the cross-country influences, i.e. the interaction between individuals in one country with individuals in another country, have not been explicitly included. Putsis, Balasubramaniam, Kaplan and Sen (1997) have found different mixing patterns (cross-country interactions), and suggest investigating the implications of different mixing patterns on the choice between a waterfall and sprinkler strategy. So far, this has not yet been done.

A final limitation is the fact that the authors test their theory with a hypothetical example. For real-life support they refer to a publication by Riesenbeck and Freeling (1991). However, this latter study does not describe the results of an empirical study about the appropriateness of either a waterfall or a sprinkler strategy, but only gives some examples of recent product introductions following a sprinkler strategy in a descriptive way.

The purpose of this research is to extend this research by formulating a conceptual framework, which describe the process of a product launch in international markets and to include a complete set of variables that influence both the timing and sequencing of entering into foreign markets. The proposed framework should be applied to real-life, realistic data, in order to be able to provide reliable suggestions to international marketing managers who have to make global launch decisions.

4. Conceptual Framework and Hypotheses

I will develop a conceptual framework which will identify potential determinants of new product introduction around two broad groups of factors, country characteristics and category characteristics. I will further classify country characteristics into economics, cultural, and information access variables. The subsequent discussion will develop specific hypotheses for each of these variables. Furthermore, I will investigate the factors impacting the choice of incremental vs. simultaneous entry.

Country Characteristics

A. Economic Variables. Four economic constructs are likely to play an important role in the introduction of new products: a country’s wealth, economic progressiveness, economic roles in the household, and openness of the economic system.

(1). Wealth: Prior research posits that wealth strongly influences the speed with which inhabitants of a specific country adopt a new product (Helsen et al. 1993). So we can expect that wealth will have a strong influence on new product introduction. A well-known conclusion of the diffusion literature is that innovators generally are
wealthier than later adopters (Rogers 1995). Wealthier people attach a lower value to money, which is what economists call the “wealth “ effect. The lower utility of money has two consequences. First, wealthier people can better afford the risks of adopting a new product early (Dickerson and Gentry 1983). Risk is an important determinant of timing of adoption (Sheth 1968). Second, because prices of new products tend to start high and drop steadily (Golder and Tellis 1998), wealthier people will be able to afford new products early when prices are high. In sum wealthier people are expected to adopt a new product earlier than less-wealthy people. So, with this supposition in mind, the following hypothesis can be drawn:

**HYPOTHESIS 1 (H1).** New products will be introduced first in countries with higher average wealth than in those with less average wealth.

**Economic Progressiveness:** One meaning of economic progressiveness is the extent to which wealth is distributed within countries. Even when a population at large in a country has high average wealth, it may be concentrated in a few homes. In this case, the vast majority of people may still be poor and may be unable to afford the new product. Thus, when considering wealth per capita, high disparity in wealth may mean that many people cannot afford a new product, causing it to take off later then when income disparity is low.

Economic Progressiveness also refers to the extent to which countries participate in economic unions. Country unions facilitate the movement of capital, labour, suppliers, and goods between countries. Unions reduce economic disparity among countries and encourage the formation of a common market. This economic atmosphere is most likely to promote the dispersion and introduction of new products in countries that belong to the union. Thus, launching of new products may develop more rapidly within countries that take part in such unions. This argument is also in line with the finding of Mahajan and Muller (1994) that a borderless Europe leads to faster diffusion. Thus, with this supposition in mind the following hypothesis is proposed:

**HYPOTHESIS 2 (H2).** New products will be launches early in countries with greater economic progressiveness than in countries with lower economic progressiveness.

**Economic Roles in the Household:** Over the second half of the century there has been a steady change in work roles in the family. Families have moved from having predominantly one income earner to two income earners (with the woman, in addition to the man, working outside the home). Such households experience intense pressure on time, and the family has less time for housework, relaxation and entertainment. Such families put high value on any appliances that help them save time. All new products have at least some time saving features. For example, dryer and washer free a great deal of time compared to manual washing and hanging clothes to dry. VCRs enable convenient watching of movies at home instead of time consuming trips to movie theatres. Home computers save time in words processing and home account.

Thus, we expect that countries in which more women work outside the home are more likely to adopt durables faster than those in which fewer women do so. This position
is consistent with that of Gatignon et al. (1989). Based on this discussion the following hypothesis is proposed:

HYPOTHESIS 3 (H3). New products will be released faster in countries with a high activity rate of women than in countries with a low activity rate of women.

(4). Openness of the Economic System: The openness of the economic system of a country refers to the extent to which the country is involved in international trade. Because of increasing international free trade between countries, this may be an important and increasingly relevant factor in the international introduction of new products. Open economic systems may speed the launching time of new products for two reasons. First, economic openness encourages the development or opening of unified infrastructure between countries, such as freeways, phone lines, railways, TV broadcasting, etc. Such infrastructure may facilitate the faster spread of new products through observation or word of mouth. Economic openness also fosters greater competition, which increases production and distribution efficiency (Talukdar et al. 2001). Savings from these efficiencies should make more new durables more affordable to consumers, with a faster takeoff as a consequence. So we hypothesize:

HYPOTHESIS 4(H4). New products take off faster first in countries that have a more open economic system than in countries that have a less open economic system.

B. Cultural Variables. Prior research suggests that a country’s culture strongly affects the speed at which its citizens adopt a new product (Dekimpe et al. 2000, Gatignon et al. 1989, Takada and Jain 1991). I will identify four cultural variables that can affect the introduction of new products across countries: uncertainty avoidance, masculinity, need for achievement, and industriousness.

(1). Uncertainty Avoidance: Uncertainty avoidance refers to the level of anxiety about the future (Hofstede 1980, 2001). Societies that are high in uncertainty avoidance continuously feel the inherent uncertainty in life as a threat that must be fought, while societies low in uncertainty avoidance more easily accept uncertainty and take “each day as it comes” (Hofstede 1980).

We expect countries high in uncertainty avoidance to show later takeoffs than those that are low in uncertainty avoidance, for two reasons. First societies that are low in uncertainty avoidance are more willing to take risks. Therefore, they will more readily accept new products (Roger 1995). Second, societies high in uncertainty avoidance consider novel ideas as dangerous and are more intolerant toward change than societies low in uncertainty avoidance (Hofstede 1980). Thus, countries that are low in uncertainty avoidance will embrace a new product more easily than countries that are higher in uncertainty avoidance.

My expectation is also consistent with prior research. For example, Lynn and Gelb (1996) find a negative correlation between a country’s uncertainty avoidance and the penetration of six consumer durables. Steenkamp et al. (1999) find that consumers in countries high in uncertainty avoidance are less innovative than consumers in countries low in uncertainty avoidance.
HYPOTHESIS 5(H5). New products will be takeoff faster in countries low in uncertainty avoidance than countries high in uncertainty avoidance.

(2). Masculinity: In most culture men tend to be more assertive, while women tend to be more nurturing. Male behaviour is associated with autonomy, aggression, exhibition, and dominance, while female behaviour is associated with nurturance, affiliation, and humility (Hofstede 1980, 2001). Masculinity and femininity refer to the sex roles pattern in society at large, to the extent it is characterized by male or female characteristics. We expect masculinity to affect the speed of product introduction for two reasons.

First, masculine societies attach more value to recognition and wealth, while feminine societies attach more value to human contacts and living environment (Hofstede 1980). The adoption of new products allows consumers to exhibit their wealth and success, which may be more compatible to masculine societies. Consumers in masculine societies may thus show higher innovativeness, as compared to consumers in more feminine societies (Steenkamp et al 1999).

Second, in masculine societies people tend to make decisions independently and admire the strong and independence (Hofstede 1980). When a new product first emerges, adoptions are few and require independent decisions by innovators. This trait of masculine societies may also lead to better acceptance of new products. In contrast, in feminine societies the tendency to make group decisions may lead to fewer acceptances of new products. For all these reasons, we expect masculine countries to show faster takeoff than feminine countries.

So, the following hypothesize can be suppose:

HYPOTHESIS 6(H6). New products will be introduced first in countries high in masculinity than in countries low in masculinity.

(3). Need for Achievement: In one of the earliest discussion of need for achievement, Murray (1938) describes it as a tendency or desire to do things rapidly and/or as well as possible. Need for achievement includes successfully and independently overcoming obstacles, competing with and surpassing others, and high self-regard. Veroff et al. (1962) associate a high need for achievement particularly with working harder, being less satisfied with current success, and being more oriented to the future fruits of work. All these traits may lend themselves to greater eagerness for adopting new products and greater willingness to experiment with new products as soon as they are available. Thus, we expect:

HYPOTHESIS 7(H7). New products to be launched first in countries in which the inhabitants have a high need for achievement than in countries in which the inhabitants have a low need for achievement.

(4). Industriousness: Industrious people are inclined to work and tend to value the fruits of work more than less industrious people. The industriousness of a population can affect the speed of introduction for supply and demand reasons. Such people
realise that innovations can make work more productive as well as make rest from their work more productive, so industrious people tend to be more receptive to innovations as well as to work harder to develop innovations. Thus, when a new product is available, industrious entrepreneur, retailers, and distributors are likely to work harder to make this product available to the general population. At the same time, the people themselves are more likely to search for, try out, and adopt the new product. Thus, the new product is likely to take off faster in an industrious culture than in one that is not industrious. So we expect the following.

**HYPOTHESIS 7** (H7). New products to be launched in countries with a more industrious culture than in one that is less industrious.

(C). Information Access. Prior research suggests that people’s access to information strongly affect the speed at which they adopt a new product (Rogers 1995). Therefore, we may expect that a new product will be introduced first in countries in which inhabitants have easy access to information than in other countries. I will identify three factors that capture different dimensions of information access: media intensity, mobility, and education.

(1). Media Intensity: Mass media such as newspapers, radio, and television play an important role in creating awareness of a new product among potential adopters (Beal and Rogers 1960) and influencing acceptance of a new product (Kats and Lazarsfeld 1995). Mass media may also lead to greater ability of consumers to detect superior new products, and thus increase the rate at which, and the likelihood that, consumers will adopt them. Mass media also contribute to the cosmopolitanism of consumers of a country especially if it concerns “cosmopolite channels”. Through cosmopolite channels, consumers in a target country can access information about innovations that have been introduced in other target countries, even before the innovation is introduced in the target country (Gatignon et al. 1989). Such information can hasten the launching of the innovation in the target country. For all these reasons, we can hypothesize:

**HYPOTHESIS 9** (H9). New products to be launched first in countries high in media intensity than in countries low in media intensity.

(2). Mobility: Interpersonal communication affects the rates at which consumer learn about new products. An important facilitator of such communication is mobility. Gatignon et al. (1989) have shown that the higher the mobility of a country’s inhabitants, the more rapidly the new products penetrate the social system. So, we expect the following.

**HYPOTHESIS 10** (H10). New products to be introduced first in countries in which the inhabitants have high mobility than in countries in which the inhabitants have low mobility.

(3). Education: Education involves the exposure of people to a constant of new ideas, which makes them more receptive to innovations. Education also sensitizes people to the importance of technology in human progress. That again makes them more
receptive to innovations. Indeed, a general finding in diffusion research is that educated people tend to adopt new products earlier than none educated people (Rogers 1995). So, we expect the following.

**HYPOTHESIS 11**(H11). New products to be introduced first in countries in which the inhabitants have enjoyed higher education than in countries in which the inhabitants have not enjoyed higher education.

**Category Characteristics**

I will identify four category characteristics that may affect the probability of introducing new products: product class, market penetration, number of prior launching, and year of introduction. (Although these variables are intrinsically category characteristics, some, like market penetration, number of prior launching, and introduction year, could also vary by countries.)

1. **Product Class**: Product class may affect the probability of a new product’s introduction (Gatignon et al. 1989, Golder and Tellis 1997). In particular, I will distinguish between white goods, such as kitchen and laundry appliances, and brown goods, such as entertainment and information products. We expect brown goods to take off earlier than white goods because they appeal to all members of a household, provide more instant gratification, and are more visible to guests. Thus, we hypothesize:

**HYPOTHESIS 12**(H12). Brown goods take off faster than white goods.

2. **Market Penetration**: We define market penetration as the percentage of households that have purchased the new product. Prior research posits that product categories reach takeoff at an average market penetration of 2.5-3% (Golder and Tellis 1997). The diffusion literature also suggests that market penetration may be an important correlate of the event that we call takeoff (Sultan et al. 1990). Thus, an increase in market penetration increases the likelihood of a takeoff. Thus we hypothesize:

**HYPOTHESIS 13**(H13). The higher the market penetration the higher the probability early introduction of a new product.

3. **Prior Launching**: A new product’s prior introduction in other countries can stimulate takeoff in a target country for at least four reasons. First, as the product takes off in other countries, the media are more likely to report its use or popularity, increasing its attractiveness in the target country. Second, on seeing a takeoff of a new product in other countries, manufacturers and retailers are more likely to promote sales in the target country, triggering a takeoff. Third, takeoff in other countries implies more adopters, so that a consumer in a target country has a higher probability of contacting an adopter from the other countries. Such a contact can increase acceptance of the new product and thus takeoff in the target country. Fourth, when a product takes off in other countries, potential adopters in a target country are more likely to perceive the new product to be a success. This perception is likely to reduce the perceived risk
associated with adopting the new product, increasing acceptance of the new product and takeoff in the target country. Thus, we hypothesize:

HYPOTHESIS 14(H14). The higher the prior takeoffs in other countries, the higher the probability of takeoff in a target country.

Year of Introduction: The literature is ambiguous about the effect of the year of introduction. Golder and Tellis (1997) argue that due to the faster speed of technological innovation in more recent years, new products improve faster. Thus they are likely to appeal to consumers and take off sooner than products introduced in prior decades. On the other hand, Bayus (1992, 1994) argues that technological changes is not occurring any faster in more decades than it did in earlier decades. By this logic, takeoff should not occur any faster in more recent decades than it did in earlier decades. Recently, Van den Bulte (2000) showed that although on average there has been an increase in diffusion speed, this effect disappears when one controls for economic and demographic evolutions as well as the nature of the product studied. There, I will not posit a hypothesis for this effect, but merely include it as a control variable.

Factors impacting the choice of incremental vs. simultaneous entry.

One of the main questions this research will want to investigate is; how should a multinational firm introduce a new product into its global market? Should it first attack and conquer a domestic market before moving into overseas markets or should it plan for a global attack by launching the product in all its global market simultaneously?

This research will investigate and analysis under what conditions a waterfall (where markers are entered sequentially) and sprinkler (where markets are entered simultaneously) strategies to attempt to answer the above research questions. I will investigate optimal conditions for the implementation of these two entry strategies by examining the following four conditions:

(a) The nature of the product.
(b) The market.
(c) Cost conditions.
(d) Competition.

Prior research posits that multinational firms should prefer a waterfall strategy if: -

- The product has a very long life cycle.
- The foreign market, as compared to the home market is small.
- The foreign market is characterised by a slow growth rate.
- The foreign market is not innovative.
- There are weak competitors in the foreign market.
- Competitors engage in collusive behaviour.
- The firm enjoys a monopoly position in the foreign market.

It may be argued that most of these conditions do not hold in today’s market place. Very few firms can really attain absolute monopoly power in their global market or count on “gentlemanly” behaviour from their competitors (See, e.g., Green and Larsen 1987) for issues related to the behaviour of Japanese firms in the U.S. or in other global markets. Planning a global rollover based on the assumption that foreign competitors are very weak is myopic (as has been proven by several foreign competitors in the U.S. automobile markets).

Although some foreign markets may be small, and cost of entry high, the trend towards the integration of markets such as the unification of Western Europe make more non-American markets attractive for the sprinkler entry.

Finally, the emergence of global customers, a growing trend towards shorter product life cycles (See, e.g., Olshawsky, 1980) and increased world pressure for less trade barriers, as well as other factors that might lead to less innovative markets (such as the pressure from the U.S. on Brazil, India, and Japan for less trade barriers) make the conditions for delayed entry (i.e., waterfall strategy less likely). Today, the market conditions in general seem to favour a sprinkler rather than a waterfall strategy.

To be able to advice management practitioners and to make recommendations, optimal conditions for the implementation of these two strategies will be investigated.

5. Planning of the Research

Year 1

During the first year, I will conduct an extensive Literature research study on global launch decisions. Based on this, I will work out my research proposal and the problems mentioned above in more detail and come up with detailed plans for the research.

Based on this extensive Literature study a conceptual framework and a set of research hypothesis have to be proposed. A research model will be proposed as well. Also a questionnaire has to be developed.

In addition, I will attend a course in research training organised by the University. At the end of the first year, I will summit an end of year report.
Year 2

During the second year, a pilot study should be conducted. It will include protesting the questionnaire, and interviewing international marketers responsible for global launch decisions. I will have some teaching responsibilities, i.e. teaching marketing courses related to my project and supervising a number of students during internship programmes. More data collecting, analysing and evaluation during the second part of the second year.

Year 3

Reporting the results in two ways.

- An article based on the empirical investigation that can be submitted to a high level marketing journal
- Writing up and correction my thesis
- At the end of year 3 the thesis has to be defended.

6. References


